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JOURNAL.**



Daily Log of the Anchorage of the U.S.S. Albatross

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— AND —
DAY'S WORK BOOK.
1907.**

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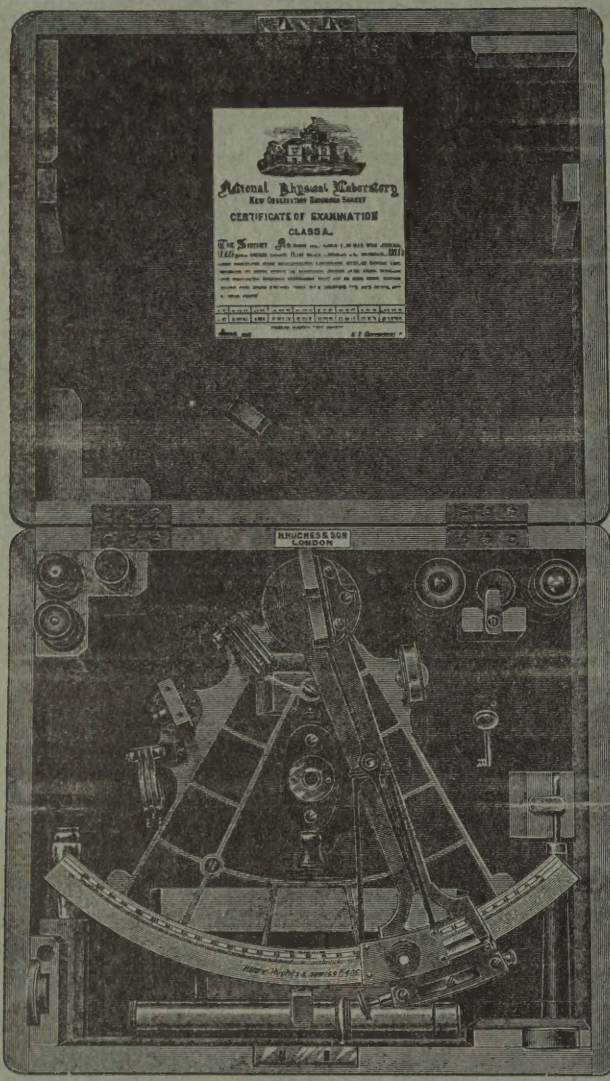
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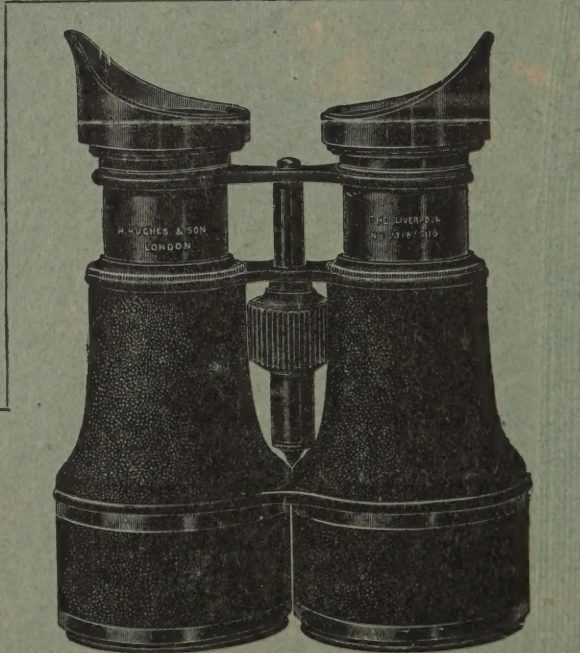
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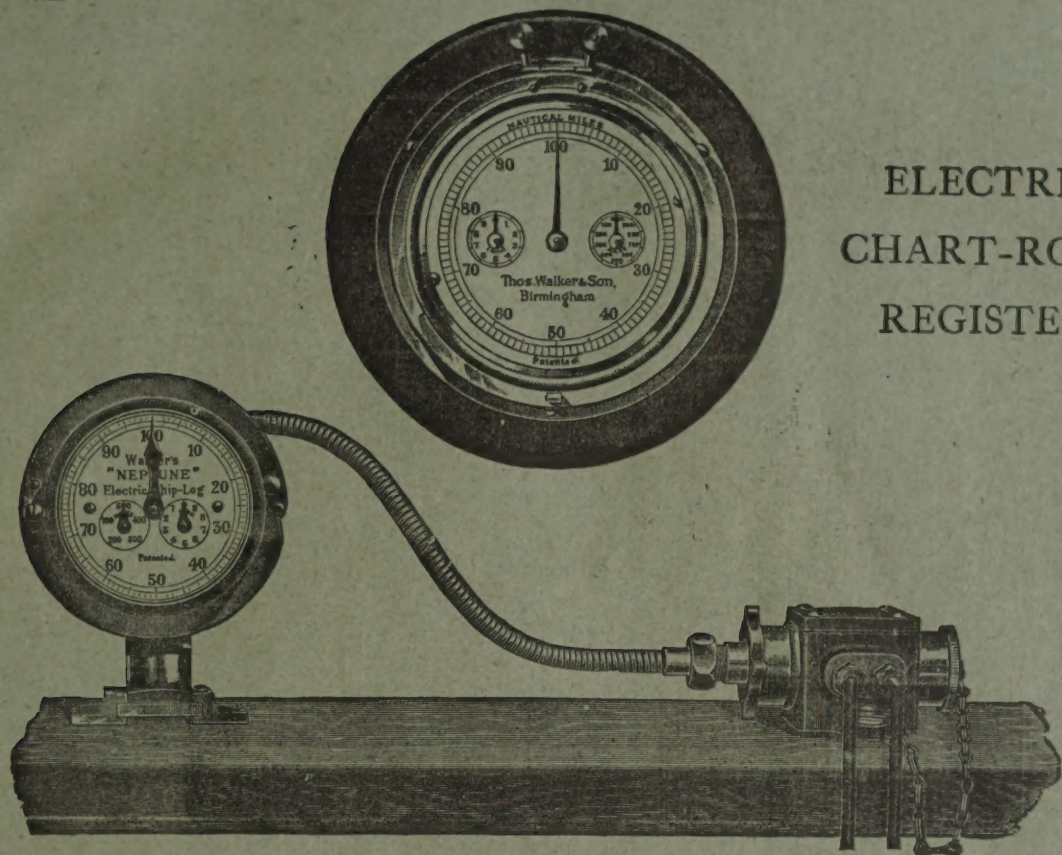
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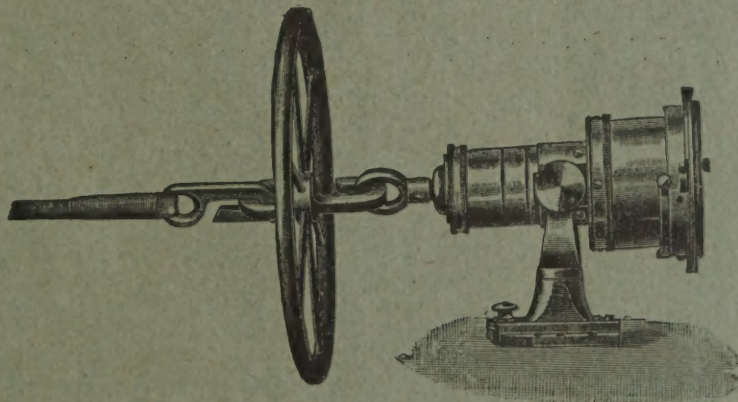
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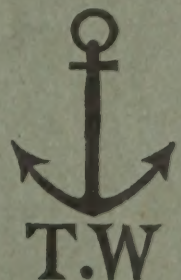
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AND

DAY'S WORK BOOK

FOR

1907



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CALENDAR FOR 1907.

— WITH —

LONDON DAILY TIDE TABLES.

GIVING DEPTH OF WATER ON SILL OF EAST INDIA DOCK ROAD ENTRANCE.

N.B.—High Tides, with probable overflows, may be expected on these days marked by a thick line.

SEPTEMBER.					OCTOBER.					NOVEMBER.					DECEMBER.				
Day of W'k.	Day of M'th.	Morn.	Aft.	Depth on Sill, E.I.D. New Ent.	Day of W'k.	Day of M'th.	Morn.	Aft.	Depth on Sill, E.I.D. New Ent.	Day of W'k.	Day of M'th.	Morn.	Aft.	Depth on Sill, E.I.D. New Ent.	Day of W'k.	Day of M'th.	Morn.	Aft.	Depth on Sill, E.I.D. New Ent.
S	1	7 57	8 29	27 2	Tu	1	8 19	9 1	26 7	F	1	10 22	10 56	27 3	S	1	10 29	10 58	27 11
M	2	9 8	9 52	26 11	W	2	9 50	10 32	26 8	S	2	11 26	11 53	28 1	M	2	11 27	11 52	28 9
Tu	3	10 34	11 11	27 1	Th	3	11 9	11 43	27 3	S	3	—	0 16	29 1	Tu	3	—	0 16	29 8
W	4	11 44	—	27 7	F	4	—	0 11	28 3	M	4	0 36	0 56	30 1	W	4	0 37	0 58	30 6
Th	5	0 15	0 40	28 5	S	5	0 34	0 54	29 3	Tu	5	1 15	1 32	30 9	Th	5	1 19	1 40	31 0
F	6	1 4	1 24	29 3	S	6	1 13	1 31	30 1	W	6	1 49	2 8	31 3	F	6	2 2	2 23	31 6
S	7	1 43	2 1	29 10	M	7	1 48	2 4	30 8	Th	7	2 26	2 44	31 8	S	7	2 45	3 7	31 7
S	8	2 17	2 32	30 5	Tu	8	2 20	2 35	31 4	S	8	3 4	3 24	31 7	S	8	3 31	3 55	31 4
M	9	2 47	3 3	30 11	W	9	2 52	3 10	31 6	S	9	3 44	4 5	31 4	M	9	4 20	4 45	30 11
Tu	10	3 20	3 37	31 1	Th	10	3 27	3 45	31 6	S	10	4 27	4 49	30 9	Tu	10	5 10	5 36	30 2
W	11	3 55	4 14	31 1	F	11	4 4	4 24	31 2	M	11	5 12	5 38	29 8	W	11	6 4	6 34	29 1
Th	12	4 32	4 49	30 10	S	12	4 43	5 2	30 7	Tu	12	6 7	6 39	28 6	Th	12	7 5	7 37	28 4
F	13	5 5	5 23	30 4	S	13	5 22	5 47	29 6	W	13	7 13	7 49	27 11	F	13	8 9	8 44	28 3
S	14	5 44	6 7	29 5	M	14	6 13	6 41	28 5	Th	14	8 30	9 16	28 1	S	14	9 21	9 57	28 5
S	15	6 31	6 58	28 5	Tu	15	7 16	7 56	27 8	F	15	9 57	10 33	28 6	S	15	10 30	11 1	28 8
M	16	7 30	8 4	27 10	W	16	8 40	9 31	27 11	S	16	11 9	11 41	29 3	M	16	11 32	—	28 11
Tu	17	8 45	9 32	27 11	Th	17	10 16	10 56	28 6	S	17	—	0 6	29 7	Tu	17	0 1	0 26	29 1
W	18	10 19	11 2	28 6	F	18	11 33	—	29 0	M	18	0 29	0 52	30 1	W	18	0 48	1 10	29 8
Th	19	11 42	—	29 0	S	19	0 4	0 30	29 6	Tu	19	1 13	1 33	30 6	Th	19	1 33	1 54	29 11
F	20	0 16	0 44	29 7	S	20	0 53	1 14	30 6	W	20	1 51	2 9	30 9	F	20	2 12	2 29	30 1
S	21	1 10	1 34	30 7	M	21	1 35	1 55	31 0	Th	21	2 27	2 45	30 10	S	21	2 47	3 5	30 2
S	22	1 55	2 15	31 4	Tu	22	2 14	2 32	31 5	F	22	3 2	3 19	30 9	S	22	3 22	3 39	30 0
M	23	2 36	2 56	32 0	W	23	2 50	3 7	31 7	S	23	3 37	3 55	30 4	M	23	3 57	4 14	29 10
Tu	24	3 15	3 34	31 11	Th	24	3 25	3 43	31 3	S	24	4 13	4 29	29 11	Tu	24	4 32	4 49	29 7
W	25	3 53	4 11	31 7	F	25	4 1	4 18	30 9	M	25	4 45	5 3	29 4	W	25	5 7	5 25	29 3
Th	26	4 29	4 47	31 2	S	26	4 34	4 50	30 2	Tu	26	5 23	5 44	28 7	Th	26	5 45	6 5	28 8
F	27	5 3	5 21	30 4	S	27	5 6	5 25	29 3	W	27	6 7	6 32	27 9	F	27	6 27	6 51	28 1
S	28	5 39	6 0	29 3	M	28	5 46	6 8	28 2	Th	28	7 0	7 29	27 2	S	28	7 16	7 45	27 8
S	29	6 22	6 44	28 0	Tu	29	6 34	7 3	27 3	F	29	8 2	8 36	27 0	S	29	8 14	8 46	27 6
M	30	7 12	7 41	27 0	W	30	7 36	8 13	26 8	S	30	9 18	9 56	27 5	M	30	9 19	9 53	27 10
					Th	31	8 56	9 42	26 9						Tu	31	10 27	10 59	28 4

TIDAL CONSTANTS OF PRINCIPAL PORTS IN THE UNITED KINGDOM,

WITH DEPTH OF WATER OVER SILLS OF WET DOCKS AND TIDAL HARBOURS AT SPRINGS AND NEAPS.

THE TIME OF HIGH WATER					*Add to L. Br.					*Add to L. Br.				
At the following Ports and Places, may be approximately found by ADDING to the time of High Water at LONDON BRIDGE the hours and minutes annexed. When the sum is more than 12 hours, the excess will be understood to be the tide after noon or midnight, whichever London tide is taken.					Ports and Places with Depths on Silles of Docks and Tidal Basins.					Ports and Places with Depths on Silles of Docks and Tidal Basins.				
Example 1.—Required the time of High Water at Penzance, January 16th, morn.					H. W. at Pl.					H. W. at Pl.				
High Water at London Bridge, Jan. 16th, 5 32 morn.					Rise. Sp. Np.					Rise. Sp. Np.				
Add Tide Constant for Penzance, 2 55					*Gives Greenwich Time.					*Gives Greenwich Time.				
High Water at Penzance, Jan. 16th, 8 27 morn.					Ayr, " Harbour Depth, " Bar " Dock Sill "					Cardiff, " West Dock Sill, " East " " Roath " " Penarth " " Glamorgan Can. Sill, " River Channel Depth, " Crinan, " Canal width 24ft., depth of the Sill of Basin, " No. 3 Graving Dock, " Granville Dock Sill, " Bar Depth, " " Depth, " River Channel Depth, " at New Quays, " Custom House D'k, " Ringsend Dock "				
Example 2.—Required the time of High Water at Harwich, Jan. 6th, morn.					Barnf, " Piel Bar, " Devonshire Dock Sill, " Buccleuch " Ramsden " Barry Dock, Bristol Channel, " Dock Sill Depth, " Belfast, " Prince's D'k Entrance, " Clarendon " " Spencer " " Duferin " Sill, " Abercorn Basin, " Albert Quay, " Harbour Depth, " Dock Sill Depth, " Blyth, " Harbour Depth, " Bo'ness, " Harbour Depth, " Dock Sill " Bristol, " King Road, " Cumberland Dock Sill, " Bathurst Basin " Avonmouth Dock " Portishead " Burntisland, " Harbour Depth, " Dock " Caledonian Canal Depth, " Corpach Basin, " Muirtown "					Dunbar, " Old Harbour Depth, " Victoria " " River Quays, " King Wm. IV. D'k Depth, " Earl Gray " Victoria " Camperdown " Dungarvan, " Bar Depth, " Quay " Exmouth, " Bar Depth, " Exeter Canal "				
Casting off 12 hours— 18 7					Time of High Water at Harwich, Jan. 6th, 6 7 morn.					The figures opposite Dock Silles, Harbours, Bars, &c., designate the Depth of Water thereon at High Water.				
E., W., S., I., M., or C. after the Port or Place designates England, Wales, Scotland, Ireland, Isle of Man, or Channel Islands respectively.					*Add to L. Br.					*Add to L. Br.				
*Gives Greenwich Time					H. W. at Pl.					H. W. at Pl.				
11 10 Aberdeen, " Dock Sill Depth, " Allice, " Forth, " Dock Sill Depth, " Arbroath, " Dock Sill Depth, "					11 10 1 86 11 47					11 10 1 86 11 47				

CALENDAR FOR 1907.

— WITH —

LONDON DAILY TIDE TABLES.

GIVING DEPTH OF WATER ON SILL OF EAST INDIA DOCK ROAD ENTRANCE.

N.B.—High Tides, with probable overflows, may be expected on these days marked by a thick line.

JANUARY.						FEBRUARY.						MARCH.						APRIL.					
Day of W'k.	Day of M'th.	Morn.	Aft.	Depth on Sill, E.I.D. New Ent.		Day of W'k.	Day of M'th.	Morn.	Aft.	Depth on Sill, E.I.D. New Ent.		Day of W'k.	Day of M'th.	Morn.	Aft.	Depth on Sill, E.I.D. New Ent.		Day of W'k.	Day of M'th.	Morn.	Aft.	Depth on Sill, E.I.D. New Ent.	
		H. M.	H. M.	FT.	IN.			H. M.	H. M.	FT.	IN.			H. M.	H. M.	FT.	IN.			H. M.	H. M.	FT.	IN.
Tu	1	2 50	3 7	29	11	F	1	3 44	4 2	30	6	F	1	2 49	3 6	30	9	M	1	3 31	3 49	31	9
W	2	3 25	3 42	30	0	S	2	4 20	4 37	30	7	S	2	3 22	3 39	31	1	Tu	2	4 8	4 28	31	9
Th	3	4 0	4 18	29	11	S	3	4 55	5 12	30	7	S	3	3 57	4 15	31	3	W	3	4 48	5 9	31	4
F	4	4 36	4 53	29	11	M	4	5 31	5 51	30	2	M	4	4 34	4 52	31	4	Th	4	5 31	5 54	30	7
S	5	5 12	5 31	29	8	Tu	5	6 12	6 35	29	8	Tu	5	5 10	5 28	31	0	F	5	6 19	6 46	29	6
S	6	5 52	6 13	29	3	W	6	6 59	7 25	28	11	W	6	5 48	6 10	30	4	S	6	7 18	7 52	28	4
M	7	6 37	7 3	28	8	Th	7	7 53	8 24	28	3	Th	7	6 34	6 59	29	5	S	7	8 30	9 17	27	10
Tu	8	7 30	8 1	28	3	F	8	9 0	9 43	28	2	F	8	7 28	8 1	28	4	M	8	10 7	10 50	28	0
W	9	8 32	9 5	28	2	S	9	10 27	11 7	28	5	S	9	8 39	9 25	27	11	Tu	9	11 28	—	28	7
Th	10	9 43	10 19	28	5	S	10	11 46	—	28	11	S	10	10 13	10 57	28	0	W	10	0 4	0 32	29	7
F	11	10 55	11 30	28	10	M	11	0 23	0 54	29	11	M	11	11 39	—	28	7	Th	11	0 57	1 19	30	5
S	12	—	0 3	29	8	Tu	12	1 22	1 50	30	9	Tu	12	0 17	0 48	29	8	F	12	1 40	1 59	30	10
S	13	0 34	1 1	30	4	W	13	2 15	2 37	31	4	W	13	1 14	1 39	30	7	S	13	2 18	2 36	31	3
M	14	1 28	1 55	31	1	Th	14	2 59	3 21	31	9	Th	14	2 1	2 22	31	2	S	14	2 53	3 10	31	3
M	15	2 21	2 46	31	7	F	15	3 43	4 3	31	7	F	15	2 41	3 0	31	7	M	15	3 28	3 45	30	11
W	16	3 11	3 35	31	8	S	16	4 23	4 42	31	4	S	16	3 19	3 38	31	7	Tu	16	4 2	4 18	30	7
Th	17	3 58	4 21	31	5	S	17	5 0	5 18	30	9	S	17	3 56	4 14	31	4	W	17	4 33	4 49	30	0
F	18	4 44	5 6	31	0	M	18	5 36	5 54	29	10	M	18	4 30	4 46	30	10	Th	18	5 5	5 22	29	3
S	19	5 27	5 47	30	3	Tu	19	6 13	6 33	28	10	Tu	19	5 3	5 19	30	2	F	19	5 41	6 2	28	3
S	20	6 9	3 32	29	3	W	20	6 53	7 14	27	10	W	20	5 35	5 53	29	2	S	20	6 24	6 48	27	4
M	21	6 54	7 17	28	4	Th	21	7 39	8 8	27	1	Th	21	6 12	6 32	28	1	S	21	7 15	7 47	26	9
Tu	22	7 42	8 9	27	8	F	22	8 41	9 20	26	11	F	22	6 55	7 21	27	2	M	22	8 23	9 3	26	11
W	23	8 38	9 11	27	6	S	23	10 4	10 46	27	1	S	23	7 52	8 25	26	9	Tu	23	9 50	10 30	27	5
Th	24	9 49	10 27	27	8	S	24	11 24	11 58	27	7	S	24	9 7	9 53	26	10	W	24	11 5	11 37	28	2
F	25	11 2	11 35	28	0	M	25	—	0 30	28	1	M	25	10 39	11 19	27	3	Th	25	—	0 4	28	9
S	26	—	0 6	28	2	Tu	26	0 55	1 18	28	6	Tu	26	11 51	—	27	9	F	26	0 27	0 48	29	3
S	27	0 35	0 59	28	4	W	27	1 38	1 58	29	4	W	27	0 22	0 46	28	3	S	27	1 8	1 28	30	3
M	28	1 21	1 42	29	0	Th	28	2 16	2 33	29	11	Th	28	1 7	1 27	29	4	S	28	1 48	2 7	31	0
Tu	29	2 1	2 19	29	5							F	29	1 47	2 5	30	2	M	29	2 26	2 45	31	7
W	30	2 37	2 53	29	10							S	30	2 21	2 37	30	10	Th	30	3 5	3 26	31	10
Th	31	3 9	3 26	30	4							S	31	2 54	3 12	31	6						

MAY.						JUNE.						JULY.						AUGUST.					
Day of W'k.	Day of M'th.	Morn.	Aft.	Depth on Sill, E.I.D. New Ent.		Day of W'k.	Day of M'th.	Morn.	Aft.	Depth on Sill, E.I.D. New Ent.		Day of W'k.	Day of M'th.	Morn.	Aft.	Depth on Sill, E.I.D. New Ent.		Day of W'k.	Day of M'th.	Morn.	Aft.	Depth on Sill, E.I.D. New Ent.	
		H. M.	H. M.	FT.	IN.			H. M.	H. M.	FT.	IN.			H. M.	H. M.	FT.	IN.			H. M.	H. M.	FT.	IN.
W	1	3 48	4 10	31	9	S	1	5 11	5 37	30	8	M	1	5 53	6 19	30	2	Th	1	7 1	7 26	28	10
Tu	2	4 33	4 55	31	5	S	2	6 5	6 34	29	8	Tu	2	6 46	7 13	29	3	F	2	7 51	8 19	28	0
F	3	5 17	5 42	30	7	M	3	7 4	7 36	28	8	W	3	7 41	8 10	28	6	S	3	8 48	9 23	27	8
S	4	6 11	6 40	29	8	Tu	4	8 10	8 45	28	2	Th	4	8 39	9 11	28	2	S	4	10 1	10 39	27	6
S	5	7 14	7 49	28	5	W	5	9 22	9 57	28	3	F	5	9 45	10 18	28	2	M	5	11 13	11 46	27	8
M	6	8 27	9 8	28	0	Th	6	10 31	11 1	28	6	S	6	10 49	11 20	28	3	Tu	6	—	0 15	28	2
Tu	7	9 51	10 29	28	2	F	7	11 31	11 59	28	10	S	7	11 50	—	28	6	W	7	0 42	1 5	28	10
W	8	11 3	11 37	28	7	S	8	—	0 24	29	5	M	8	0 16	0 40	28	11	Th	8	1 27	1 47	29	3
Th	9	—	0 5	29	4	S	9	0 45	1 6	29	9	Tu	9	1 2	1 24	29	3	F	9	2 6	2 24	29	8
F	10	0 31	0 53	30	0	M	10	1 27	1 47	29	11	W	10	1 45	2 6	29	6	S	10	2 40	2 57	30	2
S	11	1 14	1 35	30	5	Tu	11	2 5	2 23	29	11	Th	11	2 24	2 41	29	11	S	11	3 13	3 30	30	4
S	12	1 54	2 12	30	7	W	12	2 41	2 59	30	0	F	12	2 58	3 14	29	10	M	12	3 47	4 4	30	5
M	13	2 28	2 45	30	9	Th	13	3 16	3 32	29	10	S	13	3 31	3 49	29	10	Tu	13	4 21	4 39	30	5
Tu	14	3 2	3 19	30	6	F	14	3 49	4 6	29	8	S	14	4 7	4 24	29	10	W	14	4 55	5 12	30	3
W	15	3 35	3 52	30	2	S	15	4 23	4 41	29	5	M	15	4 43	5 1	29	8	Th	15	5 29	5 49	29	9
Th	16	4 8	4 25	29	9	S	16	5 0	5 18	29	0	Tu	16	5 19	5 39	29	4	F	16	6 11	6 34	29	0
F	17	4 42	4 59	29	3	M	17	5 37	6 0	28	5	W	17	5 59	6 20	28	10	S	17	6 57	7 24	28	4
S	18	5 16	5 37	28	6	Tu	18	6 23	6 47	27	11	Th	18	6 42	7 6	28	4	S	18	7 53	8 27	28	0
S	19	5 59	6 22	27	9	W	19	7 14	7 42	27	8	F	19	7 33	8 1	28	1	M	19	9 4	9 46	28	2
M	20	6 47	7 14	27	3	Th	20	8 11	8 42	27	10	S	20	8 31	9 4	28	2	Tu	20	10 28	11 8	28	8
Tu	21	7 46	8 20	27	2	F	21	9 18	9 52	28	4	Th	21	9 39	10 14	28	6	W	21	11 46	—	29	2
W	22	8 58	9 37	27	8	S	22	10 24	10 54	28	10	M	22	10 48	11 24	29	1	Th	22	0 22	0 52	29	8
Th	23	10 12	10 44	28	3	S	23	11 24	11 53	29	8	Tu	23	11 58	—	29	6	F	23	1 20	1 46	30	8
F	24	11 14	11 42	29	2	M	24	—	0 20	30	1	W	24	0 29	0 57	29	11	S	24	2 10	2 33	31	3
S	25	—	0 7	29	8	Tu	25	0 46	1 12	30	6	Th	25	1 26	1 54	30	10	S	25	2 56	3 18	31	10
S	26	0 31	0 53	30	1	W	26	1 38	2 3	31	0	F	26	2 20	2 47	31	3	M	26	3 40	4 2	31	10
M	27	1 15	1 36	30	11	Th	27	2 29	2 56	31	5	S	27	3 11	3 35	31	8	Tu	27	4 23	4 43	31	7
Tu	28	1 58	2 19	31	4	F	28	3 22	3 46	31	7	W	28	4 0	4 25	31	8	W	28	5 2	5 21	31	1
W	29	2 43	3 7	31	9	S	29	4 12	4 37	31	4	Th	29	5 39	5 50	31	4	Th	29	5 39	5 58	30	2
Th	30	3 31	3 54	31	7	S	30	5 3	5 28	30	11	Tu	30	5 31	5 53	30	9	F	30	6 19	6 40	29	1
F	31	4 18	4 44	31	4							W	31	6 16	6 38	29	9	S	31	7 3	7 28	28	0

PRINTED BY
JAMES BROWN & SON, GLASGOW
"THE NAUTICAL PRESS"

TIDAL CONSTANTS FOR THE PRINCIPAL FOREIGN PORTS.

Add to L. Br.	Foreign Ports and Places in Alphabetical order.	H. W. at Pl.	Rise. Sp. Np.	Add to L. Br.	Foreign Ports and Places in Alphabetical order.	H. W. at Pl.	Rise. Sp. Np.	Add to L. Br.	Foreign Ports and Places in Alphabetical order.	H. W. at Pl.	Rise. Sp. Np.
Give Local Time.				Give Local Time.				Give Local Time.			
h. m.		h. m.	Ft.	h. m.		h. m.	Ft.	h. m.		h. m.	Ft.
0 2	Cape Sable, Bay of Fundy, ..	8 27	8 1/2	8 2	Min. River, Losing T. China, ..	0 0	6 1/2	9 15	Sands Point, U.S., ..	11 13	9 7 1/2
9 17	Cape York, Australia, ..	11 15	10 7	7 32	Moreton Bay, Queensland, ..	9 30	4 7	5 31	Sandy Hook, U.S., ..	7 29	6 1/2
6 2	Delaware River, entrance, U.S., ..	8 0	4 1/2	10 26	Nantucket, U.S., ..	0 24	3 4 3	3 22	Sarawac, Borneo, ..	6 20	15 18
2 22	Demerara River, Guayana, ..	4 20	9 4	3 2	Negapatam, Bengal, ..	5 0	3	6 15	Savannah City, U.S., ..	8 13	7 1/2
	Depth Bar River, Low Water, ..			7 52	Nelson, N. Zealand, ..	9 50	14 10	6 44	Senegal Bar, Africa, W.C., ..	8 42	6 1/2
7 6	Egg Island Light, U.S., ..	9 4	7 5 1/2	6 15	New York, U.S., ..	8 13	5 1/2 4 1/2	11 42	Seven Islands Bay, Gulf St. Law., ..	1 40	9
1 2	Espirito Bay, Brazil, ..	3 0	4		Depth L.W., ..		21	11 32	Shanghai, China, ..	1 80	10 7
9 47	Fayal, Azore, ..	11 45	4	0 52	Otago Har., N. Zealand, ..	2 50	7 6	6 8	Sheet Harbour, Nova Scotia, ..	8 6	6 1/2 4 1/2
2 2	Fernando Po, Blight of Biafra, ..	4 0	7		Pensacola, U.S., depth bar L.W., ..		22 1/2	5 57	Sierra Leone, Africa, ..	7 55	8
9 18	Fish Head, Bay of Fundy, ..	11 16	22 1/2 18 1/2	10 2	Penang, Malacca Strait, ..	Noon	9 7 1/2	0 46	Simon's Bay, ..	2 44	6 1/2 3 1/2
11 32	Forward Harbour, B. Columbia, ..	3 0	16 11 1/2	2 47	Pernambuco, S. America, ..	4 45	8 6 5	5 58	Ship Harbour, N. Scotia, ..	7 54	6 1/2 1 1/2
4 24	Frederickshab Greenland, ..	6 22	9 5	11 20	Philadelphia, U.S., ..	1 13	6 1/2 5 1/2	7 47	Singapore, Malacca Strait, ..	9 45	10 7 1/2
10 50	Funchal Bay, Madeira, ..	0 43	7	7 32	Plymouth, New, N. Zealand, ..	9 30	12 9	6 40	Sydney, Australia, ..	8 35	42 4
	Galveston Bar—Depth, L. Water, ..			9 23	Portland, U.S., ..	11 25	10 8 1/2	0 42	Table Bay, Africa, ..	2 40	5 3 1/2
6 27	Gaspé Point, Hindoostan, ..	2 25	18 13 1/2	2 32	Port Natal, Africa, ..	4 30	6	9 32	Three Rivers, St. Lawrence, ..	11 30	1
0 47	Green Island, River St. Lawrence	2 45	16 9 1/2	7 44	Port Philip, Geelong Australia, ..	9 42	7 5 1/2	2 32	Trinidad, S. America, ..	4 30	4 3
0 47	Grenada, St. George, ..	2 40	1 1/2	9 2	Port Royal, Jamaica, ..	11 0	1	7 34	Valparaiso, ..	9 32	5
5 51	Halifax, Nova Scotia, ..	7 49	6 5 1/2		Depth bar, S. Chanl., L.W., ..		19 1/2	6 2	Whitehaven, U.S., ..	8 0	6 1/2 4 1/2
9 3	Hanover Bay, Australia, ..	11 30	33 24	4 40	Quebec, Canada, ..	6 38	18 13	7 8	Wilmington, U.S., ..	9 6	3 2 1/2
6 1	Havana, Cuba, ..	8 14	3	2 30	Richmond, U.S., ..	4 28	3 1/2 2 1/2		Depth Bar, L.W., ..		8
6 17	Hobarton, Tasmania, ..	8 15	4 1/2 2 1/2	1 2	Rio de Janeiro, Brazil, ..	3 0	4 3	8 11	Yarmouth, Bay of Fundy, ..	10 9	16 13
11 1	Holmes Bay, North America, ..	10 15	4 1/2 10	5 32	Sable Island, N. Scotia, ..	7 30	4	6 17	Yio Road, Peru, ..	8 15	6
8 17	Hong Kong, China, ..	10 15	4 1/2	2 13	Saguenay, Chicoutimi, G. St. Law., ..	4 11	12 8	4 2	Yokohama, Japan, ..	6 0	6 1/2 4 1/2
11 2	Ichabo Island, W.C. Africa, ..	1 0	6 4	0 47	Tadoussac, ..	2 45	17 10	9 22	Young River, Chinhae, China, ..	11 20	12 1/2
4 1	Lagos Bar, Africa, ..	6 0	3	9 23	St. John, Bay of Fundy, ..	11 21	27 23	11 2	Ningpo fu, ..	1 0	9
6 1	Maranhm, Brazil, ..	7 9	16 10 1/2	5 32	St. John's, Newfoundland, ..	7 30	6 4	7 7	Yu-Hn-Kan Bay, ..	9 5	2 1/2

DISTANCES TO PRINCIPAL FOREIGN PORTS.

Where two sets of figures occur opposite any one Port, the upper refer to distance via Suez Canal.

In Nautical Miles from	London.	Liverpool.	Tyne.	Cardiff.	Glasgow.	Cadiz.	Christiania.	1,243	1,178	1,538	1,099	1,298	In Nautical Miles from	London.	Liverpool.	Tyne.	Cardiff.	Glasgow.
Aoyab, ..	7,944	8,775	8,235	7,795	7,995	6,532	6,462	6,922	6,370	6,582			Natal, ..	6,505	6,735	7,095	6,655	6,865
Adelaide, ..	11,444	11,374	11,784	11,295	11,494	10,015	9,945	10,305	9,860	10,065			New Orleans, ..	4,687	4,617	4,977	4,537	4,737
Aden, ..	8,745	8,675	9,035	8,595	8,795	3,085	3,015	3,375	2,936	3,135			New York, ..	8,245	8,016	8,535	8,095	8,295
Alexandria, ..	11,580	11,461	11,820	11,330	11,531	715	1,066	556	1,126	1,001			Odessa, ..	3,405	3,315	3,695	3,255	3,455
Algiers, ..	4,695	4,625	4,985	4,550	4,745	1,833	1,734	1,254	1,794	1,669			Oporto, ..	806	796	1,156	716	916
Allente, ..	9,955	9,885	10,245	9,805	10,005	8,340	3,270	3,625	3,190	3,390			Otago, ..	12,190	12,120	12,460	12,040	12,240
Almeria, ..	1,628	1,558	1,923	1,448	1,643	4,030	3,960	4,320	3,880	4,080			Palermo, ..	2,278	2,208	2,568	2,128	2,328
Amherst, ..	1,460	1,390	1,753	1,310	1,510	692	1,043	563	1,103	973			Panama, ..	11,350	11,280	11,640	11,200	11,400
Amoy, ..	8,000	7,930	8,295	7,855	8,050	6,810	6,740	7,100	6,660	6,860			Penang, ..	7,930	7,860	8,220	7,780	7,980
Arica, ..	11,520	11,450	11,810	11,370	11,570	10,340	10,263	10,630	10,190	10,383			Quebec, ..	11,165	11,095	11,455	11,040	11,215
Ascension, ..	10,020	9,950	10,312	9,870	10,070	2,215	2,145	2,505	2,065	2,265			Rangoon, ..	2,930	2,834	3,220	2,780	2,969
Athens, ..	14,180	14,110	14,470	14,030	14,230	1,330	1,260	1,620	1,180	1,380			Rio Janeiro, ..	8,025	7,955	8,315	7,875	8,075
Auckland, ..	14,180	14,110	14,470	14,030	14,230	2,680	2,453	2,970	2,530	2,388			San Francisco, ..	11,530	11,460	11,820	11,380	11,580
Azores, ..	9,730	9,660	10,020	9,580	9,780	4,187	3,950	4,470	4,037	4,100			Shanghai, ..	6,200	6,130	6,490	6,050	6,250
Barbados, ..	8,334	8,265	8,624	8,184	8,385	9,775	9,705	10,065	9,625	9,825			Sierra Leone, ..	10,540	10,470	10,830	10,390	10,590
Batavia, ..	11,270	11,200	11,560	11,120	11,320	12,910	12,840	13,200	12,760	12,960			Singapore, ..	13,630	13,560	13,920	13,480	13,680
Barcelona, ..	8,903	8,833	9,193	8,753	8,953	18,326	18,256	18,616	18,176	18,376			Smyrna, ..	8,000	7,930	8,290	7,850	8,050
Bermuda, ..	2,706	2,636	2,996	2,556	2,756	9,545	9,475	9,835	9,395	9,595			Suez, ..	8,345	8,275	8,635	8,195	8,395
Bombay, ..	12,120	12,050	12,410	11,970	12,170	2,600	2,530	2,890	2,450	2,465			Sydney, ..	11,670	11,600	11,960	11,520	11,720
Boston, ..	1,460	1,390	1,750	1,310	1,510	4,210	4,080	4,500	4,060	4,200			Trieste, ..	2,940	2,870	3,230	2,790	2,990
Bordeaux, ..	8,795	8,725	9,085	8,645	8,845	6,105	6,035	6,395	5,955	6,155			Valencia, ..	3,330	3,310	3,670	3,230	3,430
Buenos Ayres, ..	8,334	8,265	8,624	8,184	8,385	10,650	10,580	10,940	10,500	10,700			Vancouver's Is., ..	11,275	11,235	11,635	11,225	11,405
Bushire, ..	11,520	11,450	11,810	11,370	11,570	1,053	983	1,343	903	1,103			Venice, ..	10,840	10,770	11,130	10,690	10,890
Calcutta, ..	1,866	1,796	2,156	1,716	1,916	4,120	4,050	4,410	3,970	4,170			Vigo, ..	12,044	11,974	12,334	11,894	12,094
Callao, ..	8,048	7,978	8,338	7,898	8,098	7,330	7,260	7,620	7,180	7,380			Wellington, ..	2,977	2,907	3,267	2,827	3,027
Cape Horn, ..	6,330	6,260	6,620	6,180	6,380	10,830	10,760	11,120	10,680	10,880			Yokohama, ..	1,734	1,664	2,024	1,584	1,784
Carthagena, ..	10,595	10,525	10,885	10,445	10,645	1,365	1,295	1,655	1,215	1,415			Zanzibar, ..	8,866	8,796	9,156	8,716	8,916
	4,170	4,100	4,460	4,020	4,220	2,310	2,240	2,600	2,160	2,360				14,470	14,400	14,760	14,320	14,520
	3,025	2,955	3,315	2,775	2,975	9,645	9,575	9,935	9,495	9,695				2,950	2,910	3,270	2,830	3,030
	660	590	950	570	710	12,655	12,585	12,945	12,505	12,705				4,937	4,867	5,227	4,787	4,987
	6,230	6,160	6,520	6,080	6,280	2,045	1,975	2,335	1,895	2,095				805	735	1,095	655	855
	6,455	6,385	6,745	6,305	6,505	7,010	6,947	7,307	6,867	7,067				2,520	2,450	2,810	2,370	2,570
	11,500	11,430	11,790	11,350	11,550	8,300	8,230	8,590	8,150	8,350				11,870	11,800	12,160	11,720	11,920
	7,950	7,880	8,240	7,800	8,000	11,245	11,175	11,535	11,095	11,295				11,345	11,275	11,635	11,195	11,395
	9,970	9,900	10,260	9,820	10,020	11,625	11,555	11,915	11,475	11,675				14,673	14,518	14,878	14,438	14,638
	6,965	6,895	7,255	6,815	7,015	1,022	1,373	893	1,433	1,308				6,290	6,220	6,580	6,140	6,340
	7,395	7,325	7,685	7,245	7,445	2,255	2,185	2,545	2,105	2,305				8,095	8,025	8,385	7,945	8,145
	1,560	1,490	1,850	1,410	1,610													

FORMULA FOR RECORDING FORCE OF THE WIND.

0 denotes Calm.	7 denotes Moderate Gale—Double Reefs and Jib.
1 " Light air—Steering way.	8 " Fresh Gale—Triple Reefs and Courses.
2 " Light Breeze } 1 to 2 knots	9 " Stormy Gale—Close Reefs and Courses.
3 " Gentle Breeze } 3 to 4 " } clean—full.	10 " Whole Gale—Close Reefed Maintop Sail and Reefed Foresail.
4 " Moderate do. } 5 to 6 " }	11 " Storm—Storm-Stay Sails.
5 " Fresh Breeze—carrying Royals.	12 " Hurricane—No canvas.
6 " Strong do.—Single Reefs and Topgallant Sails.	

FORMULA FOR RECORDING STATE OF THE WEATHER.

s denotes Blue Sky—i.e., clear or hazy atmosphere	o denotes Overcast—i.e., whole sky covered with an impervious cloud.	w denotes Wet Dew.
c " Cloudy—detached opening clouds.	P " Passing Showers.	Dot under any letter, indicates an extraordinary degree.
d " Drizzling Rain.	Q " Squally.	By the combination of these letters all the ordinary phenomena of the weather may be recorded with certainty and brevity.
f " Fog—FF Thick Fog.	R " Rain—continuous rain.	BCM—Blue sky, with detached opening clouds, but hazy round the horizon.
g " Gloomy—dark weather.	s " Snow.	ov—Gloomy dark weather, but distant objects remarkably visible.
h " Hail.	T " Thunder.	
l " Lightning.	U " Ugly, with a heavy appearance of the weather.	
m " Misty or Hazy—so as to interrupt the view.	V " Visibility of distant objects.	

TIDAL CONSTANTS FOR PORTS IN UNITED KINGDOM AND FOR FOREIGN PORTS.

[illegible]

WITH DEPTH OF WATER OVER SILLS OF WET DOCKS AND TIDAL HARBOURS AT SPRINGS AND NEAPS.

Add to L. Br.		Ports and Places with Depths on Sills of Docks and Tidal Basins.		H. W. Rise. at P. Sp. Np.	
h. m.	'Gives Greenwich Time.	E.	4 57	Ft.	16 12
3 19	Falmouth,	E.	—	Ft.	60 56
	" Anchorage Depth,		—	Ft.	23 19
	" Graving Dock Sill "		—	Ft.	23 20
9 27	Fleetwood Port,	E.	11 12	Ft.	204 20
9 28	" Wyre Light,		11 11	Ft.	204 20
	" Harbour Depth,		—	Ft.	34 27
	Fleetwood, Dock Sill Depth,		—	Ft.	25 18
3 35	Fowey,	E.	5 14	Ft.	15 11
	" Depth,		—	Ft.	34 30
3 18	Galway,	I.	4 35	Ft.	14 11
	" Harbour Depth,		—	Ft.	19 15
	" New Dock Sill "		—	Ft.	21 17
9 44	Garston, Mersey,		11 30	Ft.	273 28
	" Dock Sill,		—	Ft.	224 15
11 30	Glasgow, Clyde,	S.	1 9	Ft.	114 9
	" Harbour Depth,		—	Ft.	23 22
	" Upper "		—	Ft.	16 15
	" Kingston Dock Depth,		—	Ft.	22 20
	" Queen's "		—	Ft.	30 24
9 30	Glasgow Dock,	E.	11 16	Ft.	20 18
	" Dock Sill Depth,		—	Ft.	21 15
7 56	Gloucester,	E.	9 45	Ft.	4 7
	" Canal Entrance, Depth,		—	Ft.	17 1
5 31	Goole, Humber,	E.	7 26	Ft.	13 —
	" Dock Sill Depth,		—	Ft.	21 15
1 7	Grangemouth,	S.	2 50	Ft.	17 15
	" Dock Sill Depth,		—	Ft.	20 17
	" New D'k Sill "		—	Ft.	24 20
	" Canal Sills "		—	Ft.	8 1
3 35	Granton Pier,	S.	2 20	Ft.	16 12
	" Harbour Depth,		—	Ft.	28 25
0 29	Greenock, Clyde,	S.	0 8	Ft.	10 8
	" Garvel Dock Depth,		—	Ft.	28 26
	" Victoria Harbour "		—	Ft.	24 22
	" Albert "		—	Ft.	24 22
	" East India "		—	Ft.	22 20
	" West India "		—	Ft.	22 20
	" James Watt Dock "		—	Ft.	32 30
1 38	Grimsby,	E.	5 36	Ft.	19 15
	" Dock Sill Depth,		—	Ft.	27 23
	" Royal Dock "		—	Ft.	25 21
1 35	Hartlepool,	E.	3 28	Ft.	15 11
	" New Dock Sill,		—	Ft.	26 22
	" Victoria "		—	Ft.	22 18
	" Jackson "		—	Ft.	22 18
	" Swainton "		—	Ft.	22 18
10 3	Harwich,	E.	0 3	Ft.	11 9
	" Harbour Depth,		—	Ft.	30 28
3 31	Holyhead,	W.	10 11	Ft.	16 12
	" Old Harbour Depth,		—	Ft.	16 12
	" New " "		—	Ft.	32 28
4 32	Hull,	E.	6 29	Ft.	22 16
	" Harbour Depth,		—	Ft.	19 15
	" Albert Dock Sill Depth,		—	Ft.	23 22
	" William Wright "		—	Ft.	28 22
	" Victoria "		—	Ft.	27 21
	" inner "		—	Ft.	20 20
	" Humber "		—	Ft.	20 20
	" Railway "		—	Ft.	20 20
	" Prince's "		—	Ft.	20 20
	" Queen's "		—	Ft.	20 20
	" Alexandra "		—	Ft.	34 27
4 0	Hfracombe,	W.	5 42	Ft.	27 21
	" Harbour Depth,		—	Ft.	24 18
10 37	Inverness,	S.	0 18	Ft.	12 9
	" Old Harbour Depth,		—	Ft.	12 9
	" Thornbush Quay "		—	Ft.	18 15
	" Cal. Canal Entrance,		—	Ft.	17 —
10 32	Ipswich,	E.	0 35	Ft.	13 1
	" Dock Gates Depth,		—	Ft.	17 13
	" Butterman's Bay "	L.W.	—	Ft.	24 20
10 10	Irvine,	S.	11 47	Ft.	10 8
	" Depth on Bar,		—	Ft.	14 12
4 25	Jersey, Rozel,	C.	6 15	Ft.	30 21
3 22	Kilrush,	I.	4 42	Ft.	14 10
	" Quay Depth,		—	Ft.	18 —
1 10	Kincardine,	S.	2 53	Ft.	17 15
	" Harbour Depth,		—	Ft.	18 15
9 39	Kingstown,	I.	11 12	Ft.	114 8
	" Harbour Depth,		—	Ft.	36 33
0 35	Kirkcaldy,	S.	2 20	Ft.	101 12
	" Dock Sill Depth,		—	Ft.	14 10
	" Harbour "		—	Ft.	16 12
9 23	Kirkcudbright,	S.	11 10	Ft.	23 14
	" Harbour Depth,		—	Ft.	25 15

CORRESPONDING READINGS OF FAHRENHEIT'S,
REAMUR'S, AND THE CENTIGRADE
THERMOMETRICAL SCALES.

Fahr.	Ream.	Centigr.	Fahr.	Rea.	Cent.	Fahr.	Rea.	Cent.
-30	-27.5	-34.4	34	0.8	1.1	116	37.3	46.6
-28	-26.6	-33.3	35	1.3	1.6	118	38.2	47.7
-26	-25.7	-32.2	36	1.7	2.2	120	39.1	48.8
-24	-24.8	-31.1	37	2.2	2.7	122	40.0	50.0
-22	-24.0	-30.0	38	2.6	3.3	124	40.8	51.1
-20	-23.1	-28.8	39	3.1	3.8	126	41.7	52.2
-18	-22.2	-27.7	40	3.5	4.4	128	42.6	53.3
-16	-21.3	-26.6	41	4.0	5.0	130	43.5	54.4
-14	-20.4	-25.5	42	4.4	5.5	132	44.4	55.5
-12	-19.5	-24.4	43	4.8	6.1	134	45.3	56.6
-10	-18.6	-23.3	44	5.3	6.6	136	46.2	57.7
-8	-17.7	-22.2	45	5.7	7.2	138	47.1	58.8
-6	-16.8	-21.1	46	6.2	7.7	140	48.0	60.0
-4	-16.0	-20.0	47	6.6	8.3	142	48.8	61.1
-2	-15.1	-18.8	48	7.1	8.8	144	49.7	62.2
0	-14.2	-17.7	49	7.5	9.4	146	50.6	63.3
1	-13.7	-17.2	50	8.0	10.0	148	51.5	64.4
2	-13.3	-16.6	52	8.8	11.1	150	52.4	65.5
3	-12.8	-16.1	54	9.7	12.2	152	53.3	66.6
4	-12.4	-15.5	56	10.6	13.3	154	54.2	67.7
5	-12.0	-15.0	58	11.5	14.4	156	55.1	68.8
6	-11.5	-14.4	60	12.4	15.5	158	56.0	70.0
7	-11.1	-13.8	62	13.3	16.6	160	56.8	71.1
8	-10.6	-13.3	64	14.2	17.7	162	57.7	72.2
9	-10.2	-12.7	66	15.1	18.8	164	58.6	73.3
10	-9.7	-12.2	68	16.0	20.0	166	59.5	74.4
11	-9.3	-11.6	70	16.8	21.1	168	60.4	75.5
12	-8.8	-11.1	72	17.7	22.2	170	61.3	76.6
13	-8.4	-10.5	74	18.6	23.3	172	62.2	77.7
14	-8.0	-10.0	76	19.5	24.4	174	63.1	78.8
15	-7.5	-9.5	78	20.4	25.5	176	64.0	80.0
16	-7.1	-8.8	80	21.3	26.6	178	64.8	81.1
17	-6.6	-8.3	82	22.2	27.7	180	65.7	82.2
18	-6.2	-7.7	84	23.1	28.8	182	66.6	83.3
19	-5.7	-7.2	86	24.0	30.0	184	67.5	84.4
20	-5.3	-6.6	88	24.8	31.1	186	68.4	85.5
21	-4.8	-6.1	90	25.7	32.2	188	69.3	86.6
22	-4.4	-5.5	92	26.6	33.3	190	70.2	87.7
23	-4.0	-5.0	94	27.5	34.4	192	71.1	88.8
24	-3.5	-4.4	96	28.4	35.5	194	72.0	90.0
25	-3.1	-3.8	98	29.3	36.6	196	72.8	91.1
26	-2.6	-3.3	100	30.2	37.7	198	73.7	92.2
27	-2.2	-2.7	102	31.1	38.8	200	74.6	93.3
28	-1.7	-2.2	104	32.0	40.0	202	75.5	94.4
29	-1.3	-1.6	106	32.8	41.1	204	76.4	95.5
30	-0.8	-1.1	108	33.7	42.2	206	77.3	96.6
31	-0.4	-0.5	110	34.6	43.3	208	78.2	97.7
32	0.0	0.0	112	35.5	44.4	210	79.1	98.8
33	0.4	0.5	114	36.4	45.5	212	80.0	100.0

TABLE OF VELOCITY AND PRESSURE
OF WIND.

Velocity per Hour. Miles.	Pressure Per sq. ft. Lbs.	Design- ation of Wind.	Velocity per Hour. Miles.	Pressure Per sq. ft. Lbs.	Design- ation of Wind.
1	0.01	Light	49	12.00	Gale.
2	0.02		50	12.50	
			51	13.00	
3	0.04		52	13.52	
4	0.08		53	14.04	
5	0.12	Gentle	54	14.58	Storm.
			55	15.12	
6	0.18		56	15.63	
7	0.24		57	16.24	
8	0.32		58	16.82	
9	0.40	Fresh	59	17.40	Hurricane.
10	0.50		60	18.00	
12	0.72		62	19.22	
13	0.84		64	20.43	
14	0.98		66	21.78	
15	1.12	Brisk	68	23.12	
16	1.28		69	23.80	
17	1.44		70	24.50	
19	1.80		71	25.20	
20	2.00		72	25.92	
22	2.42	High	73	26.64	
24	2.88		74	27.38	
25	3.12		75	28.12	
26	3.38		76	28.88	
28	3.92		77	29.64	
29	4.20	Gale	78	30.42	
			79	31.20	
30	4.50		80	32.00	
31	4.80		82	33.62	
32	5.12		84	35.28	
34	5.78		86	36.98	
35	6.12		88	38.72	
36	6.48		90	40.50	
37	6.84		92	42.32	
38	7.22		94	44.18	
40	8.00		96	46.08	
41	8.40		98	48.02	
42	8.82		100	50.00	
44	9.68		110	60.50	
45	10.12		120	72.00	
46	10.58		130	84.50	
47	11.04		140	98.00	
48	11.52		150	12.50	

DIP OF SEA
HORIZON.

Height of Eye. Ft.	Dip of Horizon "	Parallax in Altitude of Sun.
1	0.59	
2	1.24	
3	1.42	
4	1.58	
5	2.12	
6	2.25	
7	2.36	
8	2.47	
9	2.57	
10	3.7	
11	3.16	
12	3.25	
13	3.33	
14	3.41	
15	3.49	
16	3.56	
17	4.4	
18	4.11	
19	4.17	
20	4.24	
21	4.31	
22	4.37	
23	4.43	
24	4.49	
25	4.55	
26	5.1	
27	5.7	
28	5.13	
29	5.18	
30	5.24	
31	5.29	
32	5.34	
33	5.39	
34	5.44	
35	5.49	
36	6.4	
40	6.10	
45	6.50	
50	7.0	
55	7.20	
60	7.40	
65	8.0	
70	8.10	
75	8.30	
80	8.50	
85	9.0	
90	9.20	
100	9.50	

USEFUL HINTS ON CHRONOMETERS, THEIR PRESERVATION, &c.

Chronometers should be handled as little as possible on ship-board, and they should *always* be kept in the outside cases, screwed down amidships, in some secure place, and free from any current of air.

The outside case should always be kept closed, except when taking time and winding. The reason is obvious—a sudden change of temperature and exposure to the sea-air is injurious; and a sudden change of temperature will cause a Chronometer to sweat, and it will become rusty. As an instance—if you expose a Chronometer by leaving the lids of the case up through the night, the Chronometer may receive a temperature of 40°. In the morning the sun may shine, and the day prove very warm, say a temperature of 60°. This sudden change of temperature will cause it to sweat, and it is liable to become more or less rusty, and it then cannot maintain a permanent rate. Hence, will be seen the necessity of protecting, in a proper manner, (with the outside case and every care), this valuable instrument, rendered so necessary in navigation. The outside cases are lined and packed for the express purpose of keeping the Chronometer free from exposure to the sea air and the sudden changes of the atmosphere, and they should never be removed.

It has been a subject of extreme vexation to most Chronometer makers,

the course of late pursued by many ship-masters, in dispensing with the outside case. Many Chronometers of the best makers have failed, through rust produced by exposing them.

Be careful, when carrying the Chronometer to and from the ship, to secure the gimbal by the stay, keep it steady, and by all means to avoid quick circular motions.

When on board, free the stay: be particular to fasten it back to free the gimbal. Ship time for deck observations is recommended to be obtained by a watch previously compared with the Chronometer. In winding, turn it over gently, put the valve back and apply the winder, turn easy till wound up, avoiding sudden jerks. Ship-masters, by attending to the above suggestions, will generally receive a greater amount of satisfaction in the use of the Chronometer.

In the pages we have supplied for taking the daily rate and comparison of two or three Chronometers, we have also added Columns to enable the difference between each to be recorded; by regular observations, it will thus be easily found which Instrument is retaining its original rate, and can be most relied on for accuracy.

TABLE SHOWING THE EFFECT PRODUCED BY A CHANGE IN RATE OF A CHRONOMETER.

When a Chronometer gains on its rate, the computed Longitude is to the West of the true Longitude. When a Chronometer loses on its rate, the computed Longitude is to the East of the true Longitude. When, on making a well determined point of land, the Longitude by Chronometer does not agree with the actual position of the Ship, it will be convenient to refer to the following Table.

The Land not made so soon as expected.	SAILING EAST.		SAILING WEST.	
	THE CHRONOMETER HAS			
The Land made unexpectedly.	Gained Less or Lost More.		Gained More or Lost Less.	
	Gained More or Lost Less.		Gained Less or Lost More.	
	THAN ALLOWED FOR.			

ABSTRACT OF VOYAGES DURING 1907.

SHIP.	From	To	Left.	Arrived.	Days.	REMARKS.
Andrew Hicks	San Francisco	Vaitahu	Dec 19 06			
"		Crossed the Equator	Jan 6 07			
"		Arrived in Vaitahu	" 21 07	Jan 21		
"		sailed from "	Feb 6 07			
"		crossed Meridian	Mar 3 07			
"		arrived at Norfolk.	" 8 07			
"		left Norfolk Island	" 14			
"		Sighted French Rock	" 29 07			
"		" Norfolk Island	Aug 16 07			
"		Made "	" 18 07			
"		Left "	Sept 21 07			
		Crossed 180° merid ^{com E.}	" 28			
Spoke German Ship Louise - from Bremen for San Fran						
Nov. 23 - 1907 - Last letter, met on board.						

CHRONOMETER RATE JOURNAL, *Bk Andrew Hicks*

JANUARY.

[illegible]

CHRONOMETER RATE JOURNAL.

APRIL.

DAY OF MONTH	Chronometer No. 2353					Chronometer No. 2447					Chronometer No.								TEMPERATURE					
	How of G. M. T.				Daily Rate.	How of G. M. T.				Daily Rate.	Daily Difference.				 of G. M. T.					Daily Rate.	2nd Daily Difference.			
	H.	M.	S.	10th.		S.	10th.	H.	M.		S.	10th.	S.	10th.	S.	10th.	H.	M.					S.	10th.
1		48	25	6	2.7			3	57	0		0	1	5										
2			28	3					52	5														
3			31	0					54	0														
4			33	7				3	53	5														
5			36	4				3	57	0														
										5														
6		48	39	1				3	58	5														
7			41	8				4	00	0														
8			44	5					01	5														
9			47	2					03	0														
10			49	9					04	5														
11		49	53	0	3.2			4	06	0														
12			58	2					07	5														
13		50	01	4					09	0														
14			04	6					10	5														
15			07	8					12	0														
16		50	11	0					13	5														
17			14	2					15	0														
18			17	4					16	5														
19			20	6					18	0														
20			23	8					19	5														
21		50	27	0				4	21	0														
22			30	3					23	5														
23			33	4					24	0														
24			36	6					25	5														
25			39	8					27	0														
26		50	43	0				4	28	5														
27			46	2					30	0														
28			49	4					31	5														
29			52	6					33	0														
30			55	8					34	5														

CHRONOMETER RATE JOURNAL, *Andrew Shepley*

MAY.

DAY OF MONTH.	Chronometer No. 2553						Chronometer No. 2447						Chronometer No.								TEMPERATURE.	
	 of G. M. T.				Daily Rate.		 of G. M. T.				Daily Rate.		 of G. M. T.				Daily Rate.		2nd Daily Difference.			
	H.	M.	S.	10th.	S.	10th.	H.	M.	S.	10th.	S.	10th.	S.	10th.	H.	M.	S.	10th.	S.	10th.		S.
1		50	59	0	3	2		4	36	5	1	5										
2		57	02	2					38	0												
3			05	4					39	5												
4			08	6					41	0												
5			11	8					42	5												
6		51	15	0					44	0												
7			18	2					45	5												
8			21	4					47	0												
9			24	6					48	5												
10			27	8					50	0												
11		51	31	0					4	51	5											
12			34	2					53	0												
13			37	4					54	5												
14			40	6					56	0												
15			43	8					57	5												
16		51	47	0					4	59	0											
17			50	2					5	00	5											
18			53	4					02	0												
19			56	6					03	5												
20			59	8					04	0												
21		52	03	0					5	06	5											
22			06	2					08	0												
23			09	4					09	5												
24			12	6					11	0												
25			15	8					12	5												
26		52	19	0					5	14	0											
27			22	2					15	5												
28			25	4					17	0												
29			28	6					18	5												
30			31	8					20	0												
31		52	35	0					5	22	5											

CHRONOMETER RATE JOURNAL, *B. L. Andrew Hicks*

AUGUST.

DAY OF MONTH.	Chronometer No. 2353						Chronometer No. 2447						Chronometer No.								TEMPERATURE.	
	 of G. M. T.				Daily Rate.		 of G. M. T.				Daily Rate.		 of G. M. T.				Daily Rate.		2nd Daily Difference.			
	H.	M.	S.	10th.	S.	10th.	H.	M.	S.	10th.	S.	10th.	S.	10th.	H.	M.	S.	10th.	S.	10th.		S.
1		55	53	4	3	2		6	53	0			1	5								
2			56	6					54	5												
3			59	8					56	0												
4			33	0					57	5												
5			56	2					59	0												
6		56	59	4				7	00	5												
7		6	02	4					02	0												
8		56	05	6					03	5												
9			08	8					05	0												
10			11	0					06	5												
11		56	14	2				7	08	0												
12			17	4					09	5												
13			20	6					11	0												
14			23	8					12	5												
15			26	0					14	0												
16		56	29	2				7	15	5												
17			32	4					17	0												
18			35	6					18	5												
19			38	8					20	0												
20			42	0					21	5												
21		56	45	2				7	23	0												
22			48	4					24	5												
23			51	6					26	0												
24			54	8					27	5												
25			58	0					29	0												
26		57	01	2				7	30	5												
27			04	4					32	0												
28			07	6					33	5												
29			10	8					35	0												
30			14	0					36	5												
31		57	17	2					38	0												
		57	20	4																		

CHRONOMETER RATE JOURNAL, *Bk Lincoln Hook*

NOVEMBER.

[illegible]

CHRONOMETER RATE JOURNAL.

DECEMBER.

DAY OF MONTH.	Chronometer No. 238						Chronometer No. 247						Chronometer No.						TEMPERATURE.				
	of G. M. T.				Daily Rate.		of G. M. T.				Daily Rate.		Daily Difference.		of G. M. T.					Daily Rate.		2nd Daily Difference.	
	H.	M.	S.	10th.	S.	10th.	H.	M.	S.	10th.	S.	10th.	S.	10th.	H.	M.	S.	10th.		S.	10th.	S.	10th.
1	1	02	23	8	3	2																	
2		02	27	0																			
3		02	30	2																			
4		02	33	4																			
5		02	36	6																			
6	1	02	39	8																			
7		02	43	0																			
8		02	46	2																			
9		02	49	4																			
10		02	52	6																			
11	1	02	55	8																			
12		02	59	0																			
13		03	02	2																			
14		03	05	4																			
15		03	08	6																			
16																							
17	1	03	11	8																			
18		03	15	0																			
19		03	18	2																			
20		03	21	4																			
21		03	24	6																			
22	1	03	27	8																			
23		03	31	0																			
24		03	34	2																			
25		03	37	4																			
26		03	40	6																			
27	1	03	43	8																			
28		03	47	0																			
29		03	50	2																			
30		03	53	4																			
31		03	56	6																			
	1	03	59	8																			
	1-03	1-04	03	0																			

MEMORANDA.

On Feb. 13-1907. got two sperm whales.

April 27th Lat. 15-00⁰ Long 150-00⁰ got two sperm whales.

Apr Lat. 25-40⁰ Long 175-35⁰ got two sperm whales.

Apr Lat. 25-04 Long 175-24 spoke Italian bark May 16-07

June 7-24-57 " 176-14 saw school sperm whales.

" 18-26-33 " 173-13 got 2 whales

" 19-26-33 " 173-10 saw school sperm whales got 2

Oct 21-36-21⁰ " 170-17⁰ got 1 Right whale

" 31-36-00⁰ " 170-11⁰ saw 3 right whales

Nov. 5 Lat 36-48⁰ " 170-18⁰ got 3 right whales -

" 15 " 36-15⁰ " 170-05⁰ got 1 " " saw 5

18 " 36-28 " 170-14 " " " " " 2

saw
 school
 sperm
 whales

MEMORANDA.

MEMORANDA.

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, $S23^{\circ} 4' 38''$ } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time,
decreasing, { Appt. Noon, 23 4 38 } 11'42" Sub. from Mean Time, 3m 18'12s. } 1'189s. 16' 18" 18h 39m 57'03s.
Add to Appt. Time, 3 18'13 }

This day had fair wind. Ship under full sail, steering S. x E. Brought out ship's cast, and gave clothing to mess.

So ends this day -

Tuesday Jan 1st 1907

Lat. by Obs., $21-33^{\circ}$
Long. by Obs., $123-29^{\circ}$
Course by Obs., $S 14^{\circ} E$
Distance by Obs., 140
" by Log,
Var. used, 10
Dev. used, none

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 30.1
Thermom., Air, 65
" Sea, 70
Current, none
Drift,
Wind, N. E.
" Force,
Sea, smooth
Weather, good

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, $S23^{\circ} 59' 51''$ } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time,
decreasing, { Appt. Noon, 22 59 50 } 12'57" Sub. from Mean Time, 3m 46'51s. } 1'177s. 16' 13" 18h 43m 53'59s.
Add to Appt. Time, 3 46'58 }

This day had strong breeze, ship under full sail, steering South by your pass. First part of the day cloudy - middle and later part clear. Men employed at odd jobs about the deck. All hands well - Pump & light carefully attended. So ends this day.

Lat. by Obs., $18-36$
Long. by Obs., $124-19$
Course by Obs., $S x W. 1/2 W.$
Distance by Obs., 180
" by Log,
Var. used, 90
Dev. used, none

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 30.2
Thermom., Air, 69
" Sea, 73
Current,
Drift,
Wind, N. E.
" Force,
Sea, rough
Weather, good

1st Week.]

THURSDAY, 3rd JANUARY, 1907.

[3-362.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, $82^{\circ} 54' 35''$ } Var. 1 Hour, { Equation of Time, increasing, { Sun's Semi-Diam., { Sidereal Time, }
decreasing, { Appt. Noon, 22 54 34 } 13.72" Sub. from Mean Time, 4m 14.58s. } 1.163s. 16' 13" 18h 47m 50.15s.

This day commences with a strong breeze from the N. E. Ship under full plain sail, steering South by compass.

This P. M. broke up the run took account of stores

This P. M. employed at odd jobs about the deck.

At sun down took in de gallant sail and steeled S x E.

Pumps and light carefully attended to ends this day
All well.

Lat. by Obs., 15-28
Long. by Obs., 125-14
Course by Obs., S $11\frac{1}{2}$ E
Distance by Obs., 192
" by Log,
Var. used, 8°
Dev. used, none

Steaming Time, h. m.,
Average Speed, knots 10ths.

Barom., 30
Thermom., Air, 73
" Sea, 75
Current, S
Drift,
Wind, N. E.
" Force,
Sea, 2
Weather, rugged
chilly

1st Week.]

FRIDAY, 4th JANUARY, 1907.

[4-361.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, $82^{\circ} 48' 53''$ } Var. 1 Hour, { Equation of Time, increasing, { Sun's Semi-Diam., { Sidereal Time, }
decreasing, { Appt. Noon, 22 48 51 } 14.85" Sub. from Mean Time, 4m 42.31s. } 1.148s. 16' 18" 18h 51m 46.70s.

This day commences with fresh breeze from the N. E. - Ship under plain sail S x E.

Men at work in head sheets and other various jobs about the ship.

Caught one flying fish and Mrs. Church took and eat it all in one bite - Saw one turtle - Also some ship jacks

Later part of day S x E
Pumps and light carefully attended to -

all hands well
So ends this day -

Lat. by Obs., 12-51
Long. by Obs., 125-33
Course by Obs., S $3\frac{1}{4}$ E
Distance by Obs., 165
" by Log,
Var. used, 8°
Dev. used, none

Steaming Time, h. m.,
Average Speed, knots 10ths.

Barom., 29.90
Thermom., Air, 76 $\frac{1}{2}$
" Sea, 78
Current, E
Drift,
Wind, N. E.
" Force,
Sea, 2
Weather, rugged
good

NAUT. EPHEMERIS,	{ Sun's Declination, decreasing,	{ Mean Noon, S22° 42' 43"	{ Var. 1 Hour, 15.98"	Equation of Time, increasing,		{ Var. 1 Hour, 1.132a.	Sun's Semi-Diam., 16' 15"	Sidereal Time, 18h 55m 43.26s.
				Sub. from Mean Time, 5m 9.66s.	Add to Appt. Time, 5 9.75			

This day commences with light winds, ship under all sail heading S. S. E.
Middle part of the day had rain squalls.
At noon wind hauled to the south ship on the starboard tack heading E. S. E.
Employed at odd jobs about the deck.
Tins later part of the day rags and deck.
Pumps and lights carefully attended - So ends this day
All well.

Lat. by Obs., 10-50
Long. by Obs., 125-38
Course by Obs., S.
Distance by Obs., 122
" by Log,
Var. used, 8°
Dev. used, none

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 29.90
Thermom., Air, 75
" Sea, 78
Current, St.
Drift,
Wind, Variable
" Force, light
Sea, smooth
Weather, cloudy

NAUT. EPHEMERIS,	{ Sun's Declination, decreasing,	{ Mean Noon, S22° 36' 6"	{ Var. 1 Hour, 17.10"	Equation of Time, increasing,		{ Var. 1 Hour, 1.115s.	Sun's Semi-Diam., 16' 18"	Sidereal Time, 18h 59m 39.82s.
				Sub. from Mean Time, 5m 36.62s.	Add to Appt. Time, 5 36.72			

This day commences with light breeze and continues so through out the twenty four hours. Ship on the port tack by the wind heading to the South and East.
So ends this day.
All well

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom.,
Thermom., Air,
" Sea,
Current,
Drift,
Wind,
" Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, 82° 29' 9" Appt. Noon, 22 29 0 }	{ Var. 1 Hour, 18° 22' }	Equation of Time, <i>increasing</i> , Sub. from Mean Time, 6m 3.15s. Add to Appt. Time, 6 3.28	{ Var. 1 Hour, 1° 09s. }	Sun's Semi-Diam., 16' 18"	Sidereal Time, 19h 3m 36.38s.
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This day had fresh breeze from the N. E. ship heading South by East.
Employed at odd jobs about the place.
So ends this day all well

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
„ by Log,
Var. used,
Dev. used.

Steaming Time,	h.	m.,
Average Speed,	knots	10ths.,

Barom.,
Thermom., Air,
 ,, Sea,
Current,
Drift,
Wind,
 ,, Force,
Sea,
Weather,

NAUT. EPHEMERIS,	Sun's Declination, decreasing,	{ Mean Noon, Appt. Noon,	{ 82° 21' 32" 22 21 30 }	Var. 1 Hour, 19' 33"	Equation of Time, <i>increasing</i> , Sub. from Mean Time, 6m 29' 23s. Add to Appt. Time, 6 29' 34	{ Var. 1 Hour, 1' 077s.	{ Sun's Semi-Diam., 16' 17"	Sidereal Time, 19h 7m 32' 93s
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This day had fresh breeze from
the N. E. ship heading South by
East
Employed at odd jobs about the
dock
So ends this day
All well.

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
„ by Log,
Var. used,
Dev. used.

Steaming Time, h. m.,
Average Speed, knots faths.,

Barom.,
Thermom., Air,
 " Sea,
Current,
Drift,
Wind,
 " Force,
Sea,
Weather,

NAUT. EPHEMERIS,	{	Sun's Declination, decreasing,	{	Mean Noon, S22° 13' 35"	{	Var. 1 Hour, 20' 42"	{	Equation of Time, increasing, Sub. from Mean Time, 6m 54' 83s. Add to Appt. Time, 6 54' 95	{	Var. 1 Hour, 1' 066s.	{	Sun's Semi-Diam., 16' 17"	{	Sidereal Time, 19h 11m 29' 40s.

This day had fresh breeze from the S. E. - ship trading South by East.
Had rain squalls and variable winds during the day -
Men employed at various jobs about deck -
Is ends this day
All well

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.

Barom.,
Thermom., Air,
" Sea,
Current,
Drift,
Wind,
" Force,
Sea,
Weather,

NAUT. EPHEMERIS,	{	Sun's Declination, decreasing,	{	Mean Noon, S22° 5' 12"	{	Var. 1 Hour, 21' 50"	{	Equation of Time, increasing, Sub. from Mean Time, 7m 19' 33s. Add to Appt. Time, 7 20' 05	{	Var. 1 Hour, 1' 035s.	{	Sun's Semi-Diam., 16' 17"	{	Sidereal Time, 19h 15m 26' 05s.

This day had light variable winds with rain squalls - ship trading South by West -
Men employed at various jobs about the deck.
All well.

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.

Barom.,
Thermom., Air,
" Sea,
Current,
Drift,
Wind,
" Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, $82^{\circ} 56' 23''$	Var. 1 Hour,	Equation of Time, <i>increasing</i> , {	Var. 1 Hour,	Sun's Semi-Diam.,	Sidereal Time,
	<i>decreasing</i> , {	Appt. Noon, 21 56 21	22 58 ^a	Sub. from Mean Time, 7m 44 ^s .49s. {	1 ^m 013s.	16' 17"	19h 19m 22 ^s .61s.
				Add to Appt. Time, 7 44 ^s .62			

This day had variable winds
mist rain squalls. Ship on the
port tack
Men employed scraping and painting
iron work.

All well.

Lat. by Obs., 3-55-
Long. by Obs., 127-20
Course by Obs., S 24 1/2 W
Distance by Obs.,
,, by Log,
Var. used,
Dev. used,

Steaming Time,	h.	m.,
Average Speed,	knots	10ths.,

Barom.,
Thermom., Air,
 ,, Sea,
Current,
Drift,
Wind,
 ,, Force,
Sea,
Weather,

2nd Week.]

SATURDAY, 12th JANUARY, 1907.

[12-353.]

NAUT. EPHEMERIS,	Sun's Declination, <i>decreasing,</i>	{ Mean Noon, S21° 47' 9" Appt. Noon, 21 47 6 }	Var. 1 Hour, 23' 65"	Equation of Time, <i>increasing,</i> Sub. from Mean Time, 8m 8' 50s. Add to Appt. Time, 8 8' 63	Var. 1 Hour, 0' 988s.	Sun's Semi-Diam., 16' 17"	Sidereal Time, 19h 23m 19' 16s.
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This day commences with
light breeze from the S. E.
slip mudda, all sail by the
wind on the port tack.
Men employed at various
jobs about the deck.
M. washed deck. 20 mds
this day -
All well

Lat. by Obs., 2-15
Long. by Obs., 129-16
Course by Obs.,
Distance by Obs.,
" by Log., f^d
Var. used,
Dev. used, none

Steaming Time,	h.	m.,
Average Speed,	knots	10ths.,

Barom., 29.83
Thermom., Air, 82
,, Sea, 79
Current, S.E.
Drift,
Wind, S. S. E.
,, Force, light
Sea, smooth
Weather, clear

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S21° 37' 29" } Appt. Noon, 21 37 25 }	Var. 1 Hour, 24.70"	Equation of Time, increasing,		Var. 1 Hour, 0.963a.	Sun's Semi-Diam., 16' 17"	Sidereal Time, 19h 27m 15.72s.
				Sub. from Mean Time, 8m 31.91s. Add to Appt. Time, 8 32.05 }				

Had light breeze from S. S. E.
Ship under all sail - heading
about S. 21° E. -
Mast hauled up from day light
until dark -
Pumps and light carefully
attended
So ends this day -
All well.

Lat. by Obs., 2-12
Long. by Obs., 130.28
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 8"
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 29.90
Thermom., Air, 78°
" Sea, 80°
Current, Drift, E. S. E.
Wind, Force, light
Sea, smooth
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination,	{ Mean Noon, S21° 27' 24" }	Var. 1 Hour, 25.74"	Equation of Time, increasing,		Var. 1 Hour, 0.937s.	Sun's Semi-Diam., 16' 17"	Sidereal Time, 19h 31m 12.28s.
	decreasing,	{ Appt. Noon, 21 27 20 }		Sub. from Mean Time, 8m 54.72s. Add to Appt. Time, 8 54.86 }				

This day commences with a
light breeze from S. S. E. Ship under
all sail on the star board tack
first part of day
Mast hauled up from day light until
dark.
I am employed repairing and
painting iron work
So ends this day
All well.

Lat. by Obs., 2-30
Long. by Obs., 130-45
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 8"
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 29.90
Thermom., Air, 78°
" Sea, 80°
Current, Drift, E. S. E.
Wind, Force, light
Sea, smooth
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, S21° 16' 54"	Var. 1 Hour, 26° 77"	Equation of Time, increasing, {	Sub. from Mean Time, 9m 16° 38s.	Var. 1 Hour, 0° 910s.	Sun's Semi-Diam., 16' 17"	Sidereal Time, 19h 35m 8° 4s.
	decreasing,	{ Appt. Noon, 21 16 50 }			{ Add to Appt. Time, 9 17° 02 }			

Ship under all sail on the port
tack heading about South by
our pass
men employed in scraping iron
work and painting cabin -
Cooper making water filter
Must head up from day light
until dark -
All well -
So ends this day -

Lat. by Obs., *118*
Long. by Obs., *131-28*
Course by Obs., *1/2 E*
Distance by Obs.,
,, by Log,
Var. used, *8°*
Dev. used, *none*

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., *29.90*
Thermom., Air, *78°*
,, Sea, *80°*
Current, *Westerly*
Drift,
Wind, *N. E. S.*
,, Force, *light*
Sea, *smooth*
Weather, *good*

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, S21° 6' 0"	Var. 1 Hour, 27° 78"	Equation of Time, increasing, {	Sub. from Mean Time, 9m 38° 37s.	Var. 1 Hour, 0° 881s.	Sun's Semi-Diam., 16' 17"	Sidereal Time, 19h 39m 5° 39s.
	decreasing,	{ Appt. Noon, 21 5 55 }			{ Add to Appt. Time, 9 38° 52 }			

This day commenced with a fresh
breeze - Ship under all sail on
the port tack heading N. E.
At 6 A.M. crossed the equator in
longitude 131-40
Men ployed in scraping iron +
also painting
Painting spiles and top
of funnel also the after truss
Must head up from day light
until dark - All well - So ends
this day -
Started a foot on distance - at
10² a chance -
Mr Enos on the first Lt.

Lat. by Obs., *5-5 South*
Long. by Obs., *131-49*
Course by Obs., *131/4 S*
Distance by Obs., *140*
,, by Log,
Var. used, *8°*
Dev. used, *none*

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., *29.90*
Thermom., Air, *78°*
,, Sea, *80°*
Current, *Westerly*
Drift,
Wind, *E. S. E.*
,, Force, *light*
Sea, *smooth*
Weather, *fine*

NAUT. EPHEMERIS, {	Sun's Declination, <i>decreasing,</i>	{ Mean Noon, S 20° 54' 41" Appt. Noon, 20 54 36 }	Var. 1 Hour, 28 79"	Equation of Time, <i>increasing,</i>		Var. 1 Hour, 0 552a.	Sun's Semi-Diam., 16' 17"	Sidereal Time, 19h 43m 1 36s.
				Sub. from Mean Time, 9m 59 17s. Add to Appt. Time, 9 59 32				

This day commences with a fresh breeze ship under all sail steering S x E on the port tack. At noon steered S. S. E. Men employed scraping and painting iron work also putting up muzzing blocks. At 4 P. M. - the island of Vaitahu bore S. E. true. Distance 5 1/2 miles. Mast hauled up from day light until dark - All well - Mr. Curdson the lat on the second fool.

Lat. by Obs., 3 - 16
Long. by Obs., 132 - 23
Course by Obs., S 1/2 E
Distance by Obs., 130
" by Log, 132
Var. used, 8°
Dev. used, none

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 29.90
Thermom., Air, 78°
" Sea, 80°
Current, Heavily
Drift,
Wind, E. N. E.
" Force, fresh
Sea, smooth
Weather, fine.

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 20° 42' 58" } Appt. Noon, 20 42 53	Var. 1 Hour, 29 78"	Equation of Time, increasing,		Var. 1 Hour, 0 522a.	Sun's Semi-Diam., 16' 17"	Sidereal Time, 19h 46m 58 50s.
				Sub. from Mean Time, 10m 19 27s. Add to Appt. Time, 10 19 41				

This day had fresh breeze from the S. E. ship under all sail steering S. S. E. Men employed in scraping iron work and painting it. Carpenter making a tool chest. At 4.30 P. M. Island of Vaitahu was 3 3/4 miles bearing S. S. E. Mast hauled up from day light until dark - So ends this day - all well. Mr. Martin ~~was~~ the fool on the third day -

Lat. by Obs., 5 - 45
Long. by Obs., 134 - 08
Course by Obs., S 1/4 S
Distance by Obs., 180
" by Log, 189
Var. used, 8°
Dev. used, none

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 29.98
Thermom., Air, 78°
" Sea, 80°
Current, Heavily
Drift,
Wind, N. E.
" Force, fresh
Sea, smooth
Weather, fine

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 20° 30' 52"	Var. 1 Hour, 30' 75"	Equation of Time, increasing, Sub. from Mean Time, 10m 33' 68s. Add to Appt. Time, 10 33' 77	Var. 1 Hour, 0' 791s.	Sun's Semi-Diam., 16' 17"	Sidereal Time, 19h 50m 55' 06s.
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This day commences with a fresh breeze from the N. E. ship under all sail steering S. S. E. Employed scraping iron work the first part of the day. Harpentine finished tool chest in P. M. mended deck. At 5 P. M. steered S. S. E. 1/2 E. by compass. Island of Dominica bearing S. 4 x S. 1/4 E. distance 215 miles. Mast head up from day light until dark. So ends this day all well. Mr Gibbons on the let on the fourth prod.

Lat. by Obs., 7-46
 Long. by Obs., 135-39
 Course by Obs., S 4 x S
 Distance by Obs., 158
 „ by Log, 166
 Var. used, 8°
 Dev. used, none

Steaming Time, h. m.
 Average Speed, knots faths.,

Barom., 30
 Thermom., Air, 78°
 „ Sea, 78°
 Current, Drift
 Drift, N. E.
 „ Force, fresh
 Sea, smooth
 Weather, fine

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 20° 18' 23"	Var. 1 Hour, 31' 71"	Equation of Time, increasing, Sub. from Mean Time, 10m 57' 24s. Add to Appt. Time, 10 57' 33	Var. 1 Hour, 0' 759s.	Sun's Semi-Diam., 16' 17"	Sidereal Time, 19h 54m 51' 62s.
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This day commences with a fresh - or light breeze - ship under full sail steering S. S. E. 1/2 E. by compass. First part clear and fine, mellow in the part cloudy and rain squalls. At 4 P. M. Island of Dominica bore. S. 4 x S. 1/4 E. true, distance 100 miles. Mast head up from day light until dark so ends this day all well. Capt. C. S. Church on the let of on the fifth prod.

Lat. by Obs., 5-55
 Long. by Obs., 137-17
 Course by Obs., S 4 x S 1/2 E
 Distance by Obs., 115
 „ by Log, 107
 Var. used, 8°
 Dev. used, none

Steaming Time, h. m.
 Average Speed, knots faths.,

Barom., 29.97
 Thermom., Air, 80°
 „ Sea, 75°
 Current, Drift
 Drift, N. E.
 „ Force, light
 Sea, smooth
 Weather, fine

Barom.,	30"
Thermom., Air,	80
" Sea,	75
Current,	Heavily
Drift,	
Wind,	N. E.
" Force,	light
Sea,	in rough
Weather,	fine.

Barom., 30.00
Thermom., Air, 80°
,, Sea, 75°
Current,
Drift,
Wind, N. E.
,, Force,
Sea,
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 19° 33' 39" } Appt. Noon, 19 33 32	Var. 1 Hour, 34' 51"	Equation of Time, increasing,		Var. 1 Hour, 0' 662s.	Sun's Semi-Diam., 16' 17"	Sidereal Time, 20h 6m 41' 29s.
				Sub. from Mean Time, 11m 43' 46s.	Add to Appt. Time, 11 48' 59			

This day fine weather all day with variable winds. Employed in painting yards getting water - Also making fire for ship full of natives. Captured the deserter H. C. Delfau brought on board ship - put to work escaping now, at night was put in prison. Many natives cutting wood. So ends this day all well.

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom.,
Thermom., Air, 29.90
" Sea, 80°
75°
Current,
Drift,
Wind, variable
" Force,
Sea,
Weather, fine

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 19° 24' 40" } Appt. Noon, 19 24 33	Var. 1 Hour, 35' 41"	Equation of Time, increasing,		Var. 1 Hour, 0' 629s.	Sun's Semi-Diam., 16' 16"	Sidereal Time, 20h 10m 37' 84s.
				Sub. from Mean Time, 12m 3' 97s.	Add to Appt. Time, 12 4' 09			

This day commenced with a fine morning - middle and later part cloudy and rainy. Employed by getting water and natives and painting yards. Lashed on shore for the night. Natives on board ship trading fruit for bread. So ends this day all well.

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 29.90
Thermom., Air, 80°
" Sea, 75°
Current,
Drift,
Wind, variable
" Force, light
Sea,
Weather, cloudy

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 19° 10' 20" } { Appt. Noon, 19 10 13 }	Var. 1 Hour, 36° 29"	Equation of Time, increasing,		Var. 1 Hour, 0° 506s.	Sun's Semi-Diam., 16' 16"	Sidereal Time, 20h 14m 34.40s.
				Sub. from Mean Time, 12m 18.67s.	Add to Appt. Time, 12 18.79			

This day fine weather all day with light variable winds. Men employed in getting water and painting yards. Hatched red spore for the night. Governor on board for a while. Stuck in fire room. Broke out cable cash, in fire room. Sounds this day - all well.

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 29.98
Thermom., Air, 80.8
" Sea, 75-

Current,
Drift,
Wind, variable
" Force, light
Sea,
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 18° 55' 39" } { Appt. Noon, 18 55 31 }	Var. 1 Hour, 37° 16"	Equation of Time, increasing,		Var. 1 Hour, 0° 562s.	Sun's Semi-Diam., 16' 16"	Sidereal Time, 20h 18m 30.95s.
				Sub. from Mean Time, 12m 32.56s.	Add to Appt. Time, 12 32.68			

Vaitaku This day had fine weather had light variable winds. Men employed getting water, in fire room. After noon washed ship - getting cleaned up for Sunday. Sounds this day all well.

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 29.90
Thermom., Air, 75.0
" Sea,

Current,
Drift,
Wind,
" Force,
Sea,
Weather, good

NAUT. EPHEMERIS,	{	Sun's Declination, decreasing,	{	Mean Noon, S 18° 40' 37"	{	Var. 1 Hour, 38° 01"	{	Equation of Time, increasing, Sub. from Mean Time, 12m 45.64s. Add to Appt. Time, 12 45.75	{	Var. 1 Hour, 0.528s.	{	Sun's Semi-Diam., 16' 16"	{	Sidereal Time, 20h 22m 27.51s.

Commenced with fine weather and light breeze - Stay board watch on shore for liberty. Capt and wife, third mate and his crew went to Hira Thra to have dinner with Mr. Hallam. Boat capped, - all hands got a good cutting no other damage done but the loss & breaking of the spar.

Returned to the ship at 5 P.M. and went on shore for the evening to see Hulala - spent a very pleasant day - ends this day all well.

Lat. by Obs.,

Long. by Obs.,

Course by Obs.,

Distance by Obs.,

„ by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.,

Barom., 29.90

Thermom., Air, 80°

„ Sea,

Current,

Drift,

Wind,

„ Force,

Sea, 0

Weather, good

NAUT. EPHEMERIS,	{	Sun's Declination, decreasing,	{	Mean Noon, S 18° 25' 15"	{	Var. 1 Hour, 38° 86"	{	Equation of Time, increasing, Sub. from Mean Time, 12m 57.91s. Add to Appt. Time, 12 58.01	{	Var. 1 Hour, 0.494s.	{	Sun's Semi-Diam., 16' 16"	{	Sidereal Time, 20h 26m 24.06s.

Commenced with fine weather and from the N.E. - Employed in getting wood and breaking up the hold.

Patrols on board ship all day - Watch went on shore for evening also Capt and wife - Saw the Hulala dancers - came on board at 8.30 P.M.

Sounds this day all well.

Lat. by Obs.,

Long. by Obs.,

Course by Obs.,

Distance by Obs.,

„ by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.,

Barom., 29.95

Thermom., Air, 80°

„ Sea,

Current,

Drift,

Wind,

„ Force,

Sea, 0

Weather, good

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S 18° 9' 33" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, Sun's Semi-Diam., Sidereal Time,
decreasing, { Appt. Noon, 19 9 24 } 30' 68" Sub. from Mean Time, 13m 9' 36s. } 0' 460s. 16' 16" 20h 30m 20' 62s.
Add to Appt. Time, 13 9' 46 }

*Employed in getting wood
and painting head gear.
Patrons on board ship trading
all hands on board
Watch on shore for the night
So ends this day*

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.

Barom., *29.90*
Thermom., Air, *75.0*
" Sea,
Current,
Drift,
Wind,
" Force,
Sea,
Weather, *good*

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S 17° 58' 31" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, Sun's Semi-Diam., Sidereal Time,
decreasing, { Appt. Noon, 17 53 22 } 40' 48" Sub. from Mean Time, 13m 20' 00s. } 0' 426s. 16' 16" 20h 34m 17' 18s.
Add to Appt. Time, 13 20' 10 }

*Now Employed in getting wood
and painting head gear
Patrons on board ship trading
fruit.
Watch on shore for the night.
all hands on board
So ends this day*

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.

Barom., *30.00*
Thermom., Air, *75.0*
" Sea,
Current,
Drift,
Wind,
" Force,
Sea,
Weather, *good*

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 17° 37' 10" Appt. Noon, 17 37 1 }	Var. 1 Hour, 41.27"	Equation of Time, increasing,		Var. 1 Hour, 0.392s.	Sun's Semi-Diam., 16' 16"	Sidereal Time, 20h 38m 13.73s.
				Sub. from Mean Time, 13m 29.82s. Add to Appt. Time, 13 29.91				

Men employed in getting wood
Mr. Giffins and Mr. Mackie up to
Hira Hira to spend the day, and
have dinner with Mr. Wallace.
Rabbits on board ship trading.
All hands well.

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
,, by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.,

Barom.,
Thermom., Air,
,, Sea,
Current,
Drift,
Wind,
,, Force,
Sea, ☉
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, <i>decreasing,</i>	{ Mean Noon, S 17° 20' 31" } Appt. Noon, 17 20 21	Var. 1 Hour, 42.05"	Equation of Time, <i>increasing,</i>		Var. 1 Hour, 0.358s.	Sun's Semi-Diam., 16' 15"	Sidereal Time, 20h 42m 10.29s.
				Sub. from Mean Time, 13m 38.83s. Add to Appt. Time, 13 38.91				

Men employed in getting wood -
gaming and stowing wood -
Rabbits on board trading
Finished getting wood in all
got 12. bats loads of wood.
All well.

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
,, by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.,

Barom.,
Thermom., Air,
,, Sea,
Current,
Drift,
Wind,
,, Force,
Sea, ☉
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, $81^{\circ} 3' 33''$	Var. 1 Hour, $42' 50''$	Equation of Time, increasing, {	Sub. from Mean Time, $13m 47' 02s$	Var. 1 Hour, $0' 32s$	Sun's Semi-Diam., $16' 15''$	Sidereal Time, $20h 46m 6' 84s$
	decreasing, {	Appt. Noon, $17 3 23$		Add to Appt. Time, $13 47' 10$				

Finished sawing wood and storing away.
Gonima and natives on land the ding, sold all the cahci on hand, also ^{old ones} soap, tobacco, two cas ks.
Did some trading for brown stuff.
All hands well.

Lat. by Obs.,

Long. by Obs.,

Course by Obs.,

Distance by Obs.,

„ by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots faths.,

Barom.,

Thermom., Air,

„ Sea,

Current,

Drift,

Wind,

„ Force,

Sea,

Weather,

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, $81^{\circ} 46' 17''$	Var. 1 Hour, $43' 54''$	Equation of Time, increasing, {	Sub. from Mean Time, $13m 54' 42s$	Var. 1 Hour, $0' 29s$	Sun's Semi-Diam., $16' 15''$	Sidereal Time, $20h 50m 3' 40s$
	decreasing, {	Appt. Noon, $16 46 6$		Add to Appt. Time, $13 54' 48$				

Capt. - Mate and Madam - got up at 4. A. M. - went on shore - Capt and Mate - joined Governor and 3 natives on a wild "booi" hunt - Returned with a large prize, one pig "one day old" and 3 ~~chickens~~ ^{chickens} same age.
That A. M. returned to ship - in rain storm. Mr. Wallace here to spend the day - In the P. M. went on shore for the *thululu* - dance - Madam spent the fore noon with Governor's wife - The week this day, all well.

Lat. by Obs.,

Long. by Obs.,

Course by Obs.,

Distance by Obs.,

„ by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots faths.,

Barom.,

Thermom., Air,

„ Sea,

Current,

Drift,

Wind,

„ Force,

Sea,

Weather,

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 16° 28' 43"	{ Appt. Noon, 16 28 33 }	Var. 1 Hour, 44.26"	Equation of Time, increasing,		Var. 1 Hour, 0.253s.	Sun's Semi-Diam., 16' 15"	Sidereal Time, 20h 53m 59.95s.
					Sub. from Mean Time, 14m 1.01s.	Add to Appt. Time, 14 1.07 }			

Commenced with five master-
boats on board at daylight
Chased ducks - for the day - but they
afternoon - natives came on board for
the Hula dance -
All or most of the natives went on
shore at 4.30 P.M.
In the evening Capt and wife and
boat crew also natives went on shore
to end the day
All well.

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom.,
Thermom., Air,
" Sea,
Current,
Drift,
Wind,
" Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 16° 10' 52"	{ Appt. Noon, 16 10 42 }	Var. 1 Hour, 44.98"	Equation of Time, increasing,		Var. 1 Hour, 0.225s.	Sun's Semi-Diam., 16' 15"	Sidereal Time, 20h 57m 56.51s.
					Sub. from Mean Time, 14m 6.81s.	Add to Appt. Time, 14 6.86 }			

Commenced with good
weather
In forenoon built a pig pen - and
other odd jobs about deck.
In the P.M. Capt and wife second
mate went to Hira, Hira, to the sun
pigs - brought 13 of Mr. Wallace -
Came back to ship at sundown
had supper, went on shore to spend the
evening
Watch on shore for the night.
All well

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom.,
Thermom., Air,
" Sea,
Current,
Drift,
Wind,
" Force,
Sea,
Weather,

6th Week.]

WEDNESDAY, 6th FEBRUARY, 1907.

[37-328.]

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 15° 52' 45" } Appt. Noon, 15 52 34	Var. 1 Hour, 45 67"	Equation of Time, increasing,		Var. 1 Hour, 0 192s.	Sun's Semi-Diam., 16' 15"	Sidereal Time, 21h 1m 53.06s.
				Sub. from Mean Time, 14m 11.80s.	Add to Appt. Time, 14 11.85			

Arrived with five mather
fresh breeze from N. E. - At 9. A. M.
Governor came on board and gave
us full of health, in preparation for sea
harbors on friends ship
at 2. P. M. took up anchor and
proceeded to sea at 2.45. dismissed
pilot, put a boat on shore with him
and the natives. Boat returned at
3.30 P. M. - made all sails, and
stayed S. E.

On leaving Vaitahu, a schooner
bore in sight, dropped anchor at
Hira Thra.

Proceed to see with 130 fth water
26 pigs - 1 bullock. 12 1/2 boat loads of
wood. 500 bunches bananas, 52 gals
lime juice, 100 coconuts, 1 galy chicken
orange and all fruit of the season -
at 6 P. M. word came that our
Kanakas stood away.

At sundown Island of
Vaitahu was 20 miles distance bearing
N. E.

So ends the day.

Lat. by Obs.,

Long. by Obs.,

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots roths.,

Barom.,

Thermom., Air,

,, Sea,

Current,

Drift,

Wind,

,, Force,

Sea,

Weather,

6th Week.]

THURSDAY, 7th FEBRUARY, 1907.

[38-327.]

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 15° 34' 21" } Appt. Noon, 15 34 10	Var. 1 Hour, 46 34"	Equation of Time, increasing,		Var. 1 Hour, 0 159s.	Sun's Semi-Diam., 16' 14"	Sidereal Time, 21h 5m 49.62s.
				Sub. from Mean Time, 14m 16.01s.	Add to Appt. Time, 14 16.05			

This day is our first day out
from Vaitahu - Had fresh breeze
from the N. E. - steering S. E. x E.
Took down our boat of the liner
and rigged her for sailing -
Lashed deck chairs on the bow, and
put cables below decks

Lat. by Obs.,

Long. by Obs.,

Course by Obs., S. E. x E.

Distance by Obs., S. E. x E.

,, by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots roths.,

Barom., 29.90

Thermom., Air, 80°

,, Sea, 7 1/2'

Current,

Drift,

Wind, N. E.

,, Force, Fresh

Sea,

Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 15° 15' 41" } Appt. Noon, 15 15 29 }	Var. 1 Hour, 47' 00"	Equation of Time, increasing,		Var. 1 Hour, 0' 126s.	Sun's Semi-Diam., 16' 14"	Sidereal Time, 21h 9m 46' 17s.
				Sub. from Mean Time, 14m 19' 44s.	Add to Appt. Time, 14 19' 47			

Had fresh breeze from the N. E.
ship, steering N. by E. - Employed
in fixing boat and other odd jobs
about decks and rigging
Boat made up from day light
until dark -
So ends this day all well.

Lat. by Obs.,

Long. by Obs.,

Course by Obs., S 84° E

Distance by Obs.,

,, by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots faths,

Barom., 29.90

Thermom., Air, 80°

,, Sea, 75°

Current,

Drift,

Wind, N. E.

,, Force,

Sea, smooth -

Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 14° 56' 45" } Appt. Noon, 14 56 34 }	Var. 1 Hour, 47' 64"	Equation of Time, increasing,		Var. 1 Hour, 0' 094s.	Sun's Semi-Diam., 16' 14"	Sidereal Time, 21h 13m 42' 73s.
				Sub. from Mean Time, 14m 23' 09s.	Add to Appt. Time, 14 22' 11			

This day had fresh breeze from
the N. E. & rain squalls through
out the day - put out new boat
put her up mast & sails - took
in old boat and put her on the
house -
Washed in in the afternoon
all - well
So ends this day

Killed leaf creature - and
had a good dinner.

Lat. by Obs., 12 - 43

Long. by Obs., 143 - 21

Course by Obs., S 84° E

Distance by Obs.,

,, by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots faths,

Barom., 29.90

Thermom., Air, 80°

,, Sea, 75°

Current,

Drift,

Wind, N. E.

,, Force,

Sea, smooth

Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, 8 14° 37' 34" } { Appt. Noon, 14 37 23 }	Var. 1 Hour, 48 26"	Equation of Time, increasing,		Var. 1 Hour, 0 061s.	Sun's Semi-Diam., 16' 14"	Sidereal Time, 21h 17m 39 28s.
				Sub. from Mean Time, 14m 23 06s.	Add to Appt. Time, 14 23 07"			

This day had light mists all day - accompanied with rain squalls - ship under all sail, steering S. by E. x E.
Mast hauled up from daylight until dark -
Pumps and lights carefully attended so ends this day
all well.

Lat. by Obs., 13-16
Long. by Obs., 146-42
Course by Obs., S. by E. x E.
Distance by Obs., 97 1/2
" by Log,
Var. used, 80
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 29.90
Thermom., Air, 85.0
" Sea, 70.0
Current,
Drift,
Wind, N. E.
" Force,
Sea, smooth
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, { decreasing,	{ Mean Noon, S 14° 18' 9" } { Appt. Noon, 14 17 57 }	Var. 1 Hour, 48' 36"	Equation of Time, increasing, Sub. from Mean Time, 14m 25' 05s. Add to Appt. Time, 14 25' 05"	Var. 1 Hour, 0' 029s.	Sun's Semi-Diam., 16' 14"	Sidereal Time, 21h 21m 35' 84s.
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This day light breeze from the N. E. all day - ship under all sail, steering S. by E. x E.
This morning took in starboard boat to repair and paint it.
Painted the wash boat and other odd jobs about on deck -
So ends this day -
Pumps and lights carefully attended -
All hands well.

Lat. by Obs., 13-46
Long. by Obs., 147-48
Course by Obs., S. by E. x E.
Distance by Obs., 60
" by Log,
Var. used, 80
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 29.95
Thermom., Air, 85.0
" Sea, 75.0
Current,
Drift,
Wind, N. E.
" Force,
Sea, smooth
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, S 13 58' 29"	Var. 1 Hour, {	Equation of Time, increasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	decreasing, {	Appt. Noon, 13 58 18 }	49'45"	Sub. from Mean Time, 14m 25'37s. }	0'003s. }	16' 14"	21h 25m 32'39s. }
				Add to Appt. Time, 14 25'37 }			

Ship under all sail steering
S. by E. x E.
 Employed in repairing
 boat.
 Later part of day had rain
 squalls.
 All hands well - So
 ends this day -

Lat. by Obs., *14-48*
 Long. by Obs., *150-00*
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, *80*
 Dev. used,

Steaming Time, h. m.,
 Average Speed, knots roths.,

Barom.,
 Thermom., Air, *29.90*
 „ Sea, *85.0*
 „ *70.0*
 Current,
 Drift,
 Wind, *light*
 „ Force, *fresh*
 Sea, *rough*
 Weather, *good*

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, S 13 38' 36"	Var. 1 Hour, {	Equation of Time, decreasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	decreasing, {	Appt. Noon, 13 38 24 }	50'02"	Sub. from Mean Time, 14m 24'93s. }	0'035s. }	16' 13"	21h 29m 28'94s. }
				Add to Appt. Time, 14 24'92 }			

This day had fresh breeze
 accompanied with rain
 squalls. Ship under all sail -
 Steering *S. by E. x E.*
 Employed in repairing boat.
 At 2.15 P.M. Margaret Handin
 raised sperm whales trapped
 three boats, struck three whales
 saved two.
 Got whales along side ship
 At 5.30 P.M.
 Made all secure for the
 night.
 Had rain squalls during
 the P.M.
 So ends this day

Lat. by Obs., *15-00*
 Long. by Obs., *150.00*
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, *80*
 Dev. used,

Steaming Time, h. m.,
 Average Speed, knots roths.,

Barom., *29.90*
 Thermom., Air, *85.0*
 „ Sea, *70.0*
 Current,
 Drift,
 Wind, *strong*
 „ Force,
 Sea, *rough*
 Weather, *rainy*

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, 8 13° 18' 29" }	{ Var. 1 Hour, 50° 57' }	Equation of Time, decreasing,		{ Var. 1 Hour, 0° 066s. }	Sun's Semi-Diam., 16' 13"	Sidereal Time, 21h 33m 25° 50s.
				Sub. from Mean Time, 14m 23° 72s.	Add to Appt. Time, 14 23 70 }			

Commenced with rain and strong breeze - At day light. Put up cutting gear, finished at 10.30. Set topsails and started Smith's hair and strong breeze. Ends' this day - All well.

Lat. by Obs., 15-18
Long. by Obs., 150-04
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 8°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 30°-00
Thermom., Air, 85°
" Sea, 68
Current,
Drift,
Wind, N.
" Force, strong
Sea, rough
Weather, rainy

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, 8 12° 58' 9" }	{ Var. 1 Hour, 51° 10' }	Equation of Time, decreasing,		{ Var. 1 Hour, 0° 038s. }	Sun's Semi-Diam., 16' 13"	Sidereal Time, 21h 37m 22° 05s.
				Sub. from Mean Time, 14m 21° 76s.	Add to Appt. Time, 14 21 73 }			

Commenced with strong breeze and rain. At day light made sail steered Smith's. Started the try works - at 11. A.M. Heavy rain squalls had to let try works cool down. At 12.30 P.M. raised the Island of Eimeo bearing E x S. distance 18 miles. Started the try works at 1 P.M. cooled down again at 4.30 P.M. At sun down started S 1/2 E. Started try works at 8.30 P.M. again - Ends' this day all well.

Lat. by Obs., 17-30
Long. by Obs., 150-18
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 8°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 29.95
Thermom., Air, 84°
" Sea, 65
Current,
Drift,
Wind, N.
" Force, strong
Sea, rough
Weather, rainy

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 12° 37' 36"	Var. 1 Hour, 51' 61"	Equation of Time, decreasing, Sub. from Mean Time, 14m 19' 04s, Add to Appt. Time, 14 19' 01	Var. 1 Hour, 0' 129s.	Sun's Semi-Diam., 16' 13"	Sidereal Time, 21h 41m 18' 61s.
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Commenced with good weather
 and from the H. E. ship under
 all sail steering S. 1/4 x N.
 finished trying out oil
 Put boat up chains, washed
 deck and cleared up.
 Ends this day - All well

Lat. by Obs., 18-32
 Long. by Obs., S 1/4 x N
 Course by Obs., S 1/4 x N
 Distance by Obs.,
 „ by Log,
 Var. used,
 Dev. used, 9°

Steaming Time, h. m.,
 Average Speed, knots 10ths,

Barom., 30°-00
 Thermom., Air, 84°
 „ Sea, 68°
 Current,
 Drift,
 Wind, N. E.
 „ Force, fresh
 Sea, squally
 Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 12° 16' 52"	Var. 1 Hour, 52' 10"	Equation of Time, decreasing, Sub. from Mean Time, 14m 15' 59s, Add to Appt. Time, 14 15' 55	Var. 1 Hour, 0' 159s.	Sun's Semi-Diam., 16' 13"	Sidereal Time, 21h 45m 15' 16s.
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This day had fine weather
 and from the H. E. ship under
 all sail steering S. 1/4 x N.
 Mast head up from day light
 until dark -
 Nothing seen -
 All well.

Lat. by Obs., 19-27
 Long. by Obs., 153-28
 Course by Obs., S 1/4 x N
 Distance by Obs.,
 „ by Log,
 Var. used, 9°
 Dev. used,

Steaming Time, h. m.,
 Average Speed, knots 10ths,

Barom., 29.90
 Thermom., Air, 84°
 „ Sea, 68°
 Current,
 Drift,
 Wind, N. E.
 „ Force, fresh
 Sea, squally
 Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, S 11° 55' 56"	Var. 1 Hour, {	Equation of Time, decreasing, {	Sub. from Mean Time, 14m 11.41s.	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	decreasing,	{ Appt. Noon, 11 55 43 }	52.53"		{ Add to Appt. Time, 14 11.36 }	0.189s.	16' 13"	21h 40m 11.71s.

This day commenced with fine weather strong breeze ship under all sail steering S. by E.

Forenoon employed in making out after hole for flour.

Afternoon employed at odd jobs about deck.

At 4. P.M. steered S. by E.

So ends this day - all hands well.

Lat. by Obs., 20-22
Long. by Obs., 155-26
Course by Obs., S. by E.
Distance by Obs., 12.20
" by Log, 13.00
Var. used, 90
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 29.90
Thermom., Air, 82°
" Sea, 65°

Current,
Drift,
Wind, E.
" Force, Strong
Sea, ruggled
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, S 11° 34' 48"	Var. 1 Hour, {	Equation of Time, decreasing, {	Sub. from Mean Time, 14m 8.50s.	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	decreasing,	{ Appt. Noon, 11 34 35 }	58.04"		{ Add to Appt. Time, 14 8.45 }	0.219s.	16' 12"	21h 53m 8.27s.

This day commenced with strong breeze and rain. Ship under all sail steering S. by E.

Employed in making out water and other odd jobs about deck.

At 10 A.M. steered S. by E. Afternoon thick and rainy.

At 2.40 P.M. lay to on the port tack heading S. by E.

So ends this day all well.

Lat. by Obs., 21-55
Long. by Obs., 157-15
Course by Obs., S. by E.
Distance by Obs., 14.5
" by Log, 15.0
Var. used, 90
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 29.90
Thermom., Air, 82°
" Sea, 75°

Current,
Drift,
Wind, East
" Force, fresh
Sea, ruggled
Weather, rainy

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 11° 13' 29" }	{ Appt. Noon, 11 13 17 }	Var. 1 Hour, 53' 49"	Equation of Time, decreasing,		Var. 1 Hour, 0' 24.8s.	Sun's Semi-Diam., 16' 12"	Sidereal Time, 21h 57m 4' 32s.
					Sub. from Mean Time, 14m 0' 90s.	Add to Appt. Time, 14 0' 85			

Commenced with rain,
squalls all day.
At 9 A.M. raised Island
Manzanilla, bearing N. 1/2 E. x N.
miles 12.
Anchored up towards the
Island all day, heavy
mist from the S. E.
afternoon - had heavy
rain squalls with mist.
Should still be in sight.
6 P.M. started with S. E.
having hard and rainy
So ends this day
all well

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.,

Barom.,
Thermom., Air,
" Sea,
Current,
Drift,
Wind,
" Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 10° 52' 1" }	{ Appt. Noon, 10 51 48 }	Var. 1 Hour, 53' 91"	Equation of Time, decreasing,		Var. 1 Hour, 0' 27.6s.	Sun's Semi-Diam., 16' 12"	Sidereal Time, 22h 1m 1' 37s.
					Sub. from Mean Time, 13m 54' 61s.	Add to Appt. Time, 13 54' 55			

This day light gale with
heavy mist - ship steering
S. 1/2 E. x E. 1/2 S.
Heavy squalls and heavy
mist all day
At 3 P.M. we took starboard
tack under storm stay
sail and topails
So ends this day

Lat. by Obs., 22-45'
Long. by Obs., 160-25'
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.,

Barom.,
Thermom., Air,
" Sea,
Current,
Drift,
Wind, N. E.
" Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 10° 30' 22"	Var. 1 Hour, 54° 32"	Equation of Time, decreasing, Sub. from Mean Time, 13m 47' 65s.	{	Var. 1 Hour, 0° 30' 4s.	Sun's Semi-Diam., 16' 12"	Sidereal Time, 22h 4m 57' 93s.
		{ Appt. Noon, 10 30 9 }		Add to Appt. Time, 13 47' 58				

This day had strong breeze
right heavy swell.
Ship under way 1 people
and finally sleeping at 11.
Late part of the day more
tranquil and less swell.
Employed at odd jobs about
deck, & ends this day

Lat. by Obs., 23-29
Long. by Obs., 161-45
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 0°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 29-70
Thermom., Air,
" Sea,
Current,
Drift,
Wind,
" Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 10° 8' 33"	Var. 1 Hour, 54° 71"	Equation of Time, decreasing, Sub. from Mean Time, 13m 40' 03s.	{	Var. 1 Hour, 0° 31' 1s.	Sun's Semi-Diam., 16' 11"	Sidereal Time, 22h 8m 54' 48s.
		{ Appt. Noon, 10 8 21 }		Add to Appt. Time, 13 39' 95				

This commenced with light
at 11. Ship under way
saw sail steering by the
miles at the starboard
tack
Employed at odd jobs about
deck -

Broke out water -
Quitted deck's
Sounded this day.

Pumps and lights carefully
attended.

Lat. by Obs., 24-17
Long. by Obs., 162-55
Course by Obs., S 1/2 E
Distance by Obs., 84
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom.,
Thermom., Air,
" Sea,
Current,
Drift,
Wind, H H L
" Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 9° 46' 35" Appt. Noon, 9 46 23 }	Var. 1 Hour, 55' 09"	Equation of Time, decreasing,		Var. 1 Hour, 0' 35.8s.	Sun's Semi-Diam., 16' 11"	Sidereal Time, 22h 12m 51.04s.
				Sub. from Mean Time, 13m 31.77s.	Add to Appt. Time, 13 31.68 }			

By observation
This day calms through
out the day - ship on
different tracks

Lat. by Obs., ^{D.R.} 24. 05'
Long. by Obs., 163-30
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths,

Barom.,
Thermom., Air,
" Sea,
Current,
Drift,
Wind,
" Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 9° 24' 29" Appt. Noon, 9 24 17 }	Var. 1 Hour, 55' 45"	Equation of Time, decreasing,		Var. 1 Hour, 0' 33.3s.	Sun's Semi-Diam., 16' 11"	Sidereal Time, 22h 16m 47.59s.
				Sub. from Mean Time, 13m 22.88s.	Add to Appt. Time, 13 22.79 }			

This morning with ship
went to visit mill from the
Ship Stirling H. S. S.
Eugene in building flat-
iron for the mill - and
making barrels - and
also other odd job about
dock -
I end the day

Lat. by Obs., 24-10
Long. by Obs., 164-50
Course by Obs., 21 3/4 N
Distance by Obs., 70
" by Log,
Var. used,
Dev. used, 10"

Steaming Time, h. m.,
Average Speed, knots roths,

Barom., 30"
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S.
" Force,
Sea, Smooth
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 9° 2' 14"	{ Appt. Noon, 9 2 2 }	Var. 1 Hour, 55.79"	{ Equation of Time, decreasing, Sub. from Mean Time, 13m 13.39s. Add to Appt. Time, 13 13.30 }	Var. 1 Hour, 0.408s.	Sun's Semi-Diam., 16' 11"	Sidereal Time, 22h 20m 44.14s.

This day commenced with fine weather and light breeze. Ship under all sail steaming S. It x S 1/2 E. took in the Harbord boat to repair it.

Employed in making boat sails and other odd jobs about the deck.

So ends the day

Lat. by Obs., 24-30

Long. by Obs., 167-06

Course by Obs., S x S 1/2 E

Distance by Obs., 145

,, by Log,

Var. used, 10°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots roths,

Barom., 30-10

Thermom., Air,

,, Sea,

Current,

Drift,

Wind, S.

,, Force,

Sea, smooth

Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 8° 39' 51"	{ Appt. Noon, 8 39 39 }	Var. 1 Hour, 56.11"	{ Equation of Time, decreasing, Sub. from Mean Time, 13m 3.32s. Add to Appt. Time, 13 3.23 }	Var. 1 Hour, 0.431s.	Sun's Semi-Diam., 16' 10"	Sidereal Time, 22h 24m 40.69s.

This day commenced with a light breeze. Ship under all sail, Steaming S. It x S 1/2 E.

Employed in repairing and painting the Harbord boat - Longueur making hoops for the gaff topsail.

This P. M. painting the stay guys and chain aloft.

Put the Harbord boat on the cranes -

Washed decks - So ends the day - all well.

Lat. by Obs., 25-10

Long. by Obs., 169-31

Course by Obs., S x S 1/2 E

Distance by Obs., 145

,, by Log,

Var. used, 10°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots roths,

Barom., 30-10

Thermom., Air,

,, Sea,

Current,

Drift,

Wind, S. E.

,, Force,

Sea, smooth

Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, <i>decreasing,</i>	{ Mean Noon, S 8° 17' 20"	{ Appt. Noon, 8 17 8 }	Var. 1 Hour, 56° 42'	Equation of Time, <i>decreasing,</i>		Var. 1 Hour, 0° 45s.	Sun's Semi-Diam., 16' 10'	Sidereal Time, 22h 28m 37·25s.
					Sub. from Mean Time, 12m 52·60s, Add to Appt. Time, 12 52 59 }				

This day commenced with strong breeze - and heavy sea - Ship punched topsails steering S. by E.
 Employed in heaving out water in fore room
 At 12 P.M. hove ship to on port tack, heading S. x E
 All well
 Pumps and hatch carefully attended so ends this day

Lat. by Obs., 23-53-
 Long. by Obs., 172-50
 Course by Obs., *S 1/4 E*
 Distance by Obs., 185
 „ by Log,
 Var. used, 10
 Dev. used,

Steaming Time, h. m.,
 Average Speed, knots 10ths.,

Barom., 30.10
 Thermom., Air,
 „ Sea,
 Current,
 Drift,
 Wind, *S. E.*
 „ Force, *Strong*
 Sea, *rough*
 Weather, *good*

NAUT. EPHEMERIS, {	Sun's Declination, <i>decreasing,</i>	{ Mean Noon, S 7° 54' 43"	{ Appt. Noon, 7 54 31 }	Var. 1 Hour, 56° 72"	Equation of Time, <i>decreasing,</i>		Var. 1 Hour, 0° 47.6s.	Sun's Semi-Diam., 16' 10"	Sidereal Time, 22h 32m 33° 30s.
					Sub. from Mean Time, 12m 41' 52s, Add to Appt. Time, 12 41' 42 }				

Commenced with strong breeze and rough sea
 At 6 A.M. set out topsails and fore sails, and started S. by E.
 Employed at odd jobs about deck.

Lat. by Obs., 26-15-
 Long. by Obs., 173-55
 Course by Obs., *S 3/4 E*
 Distance by Obs., 135
 „ by Log,
 Var. used, 10
 Dev. used,

Steaming Time, h. m.,
 Average Speed, knots 10ths.,

Barom., 30.20
 Thermom., Air,
 „ Sea,
 Current,
 Drift,
 Wind, *E S E*
 „ Force, *strong*
 Sea, *rough*
 Weather, *good*

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S 7° 31' 58" } Var. 1 Hour, { Equation of Time, decreasing, { Sun's Semi-Diam., { Sidereal Time, decreasing, { Appt. Noon, 7 31 46 } 56.99" Sub. from Mean Time, 12m 29.83s. } Var. 1 Hour, 0.498s. 16' 10" 22h 36m 30.35s.

This day commenced with fresh from the East, ship gripper all sail steering to N. E.
Employed painting bar board boat handling boat sails and other odd jobs about deck.
3.30 P.M. washed decks
At Sundown, took in the main royal -
So ends this day -
All well

Lat. by Obs., 26-11
Long. by Obs., 178-30
Course by Obs., *N 1/4 E*
Distance by Obs., 162
" by Log,
Var. used, 10°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 30-20
Thermom., Air,
" Sea,
Current,
Drift,
Wind,
" Force, *E*
Sea, *Some choppy*
Weather, *good.*

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S 7° 9' 7" } Var. 1 Hour, { Equation of Time, decreasing, { Sun's Semi-Diam., { Sidereal Time, decreasing, { Appt. Noon, 7 8 55 } 57.25" Sub. from Mean Time, 12m 17.64s. } Var. 1 Hour, 0.518s. 16' 9" 22h 40m 26.91s.

no sights

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom.,
Thermom., Air,
" Sea,
Current,
Drift,
Wind,
" Force,
Sea,
Weather,

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S 6° 46' 9" } Var. 1 Hour, { Equation of Time, decreasing, } Var. 1 Hour, Sun's Semi-Diam., Sidereal Time, decreasing, { Appt. Noon, 6 45 58 } 57.50" Sub. from Mean Time, 12m 4.87s. Add to Appt. Time, 12 4.86 } 0.537s. 16' 9" 22h 44m 23.46s.

Lat. by Obs.,

Long. by Obs.,

Course by Obs.,

Distance by Obs.,

„ by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.,

Barom.,

Thermom., Air,

„ Sea,

Current,

Drift,

Wind,

„ Force,

Sea, ☉

Weather,

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S 6° 23' 6" } Var. 1 Hour, { Equation of Time, decreasing, } Var. 1 Hour, Sun's Semi-Diam., Sidereal Time, decreasing, { Appt. Noon, 6 22 55 } 57.73" Sub. from Mean Time, 11m 51.85s. Add to Appt. Time, 11 51.74 } 0.556s. 16' 9" 22h 48m 20.01s.

Lat. by Obs.,

Long. by Obs.,

Course by Obs.,

Distance by Obs.,

„ by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.,

Barom.,

Thermom., Air,

„ Sea,

Current,

Drift,

Wind,

„ Force,

Sea, ☉

Weather,

NAUT. EPHEMERIS, {			Sun's Declination, <i>decreasing</i> ,	{ Mean Noon, S 5° 50' 58"	Var. 1 Hour,	{	Equation of Time, <i>decreasing</i> , Sub. from Mean Time, 11m 38' 31s.	Var. 1 Hour,	{	Sun's Semi-Diam., 16' 9"	Sidereal Time, 22h 52m 16' 56s.
				{ Appt. Noon, 5 59 47 }	57-95"		Add to Appt. Time, 11 38 19 }	0' 573s.			

10th Week.]

FRIDAY, 8th MARCH, 1907.

[67-298.]

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 5° 13' 26"	{ Appt. Noon, 5 13 15 }	Var. 1 Hour, 58° 33"	Equation of Time, decreasing,		Var. 1 Hour, 0° 00' 6s.	Sun's Semi-Diam., 16' 8"	Sidereal Time, 23h 0m 9° 67s.
					Sub. from Mean Time, 11m 9° 00s.	Add to Appt. Time, 11 9° 88			

At 6.45 A.M. raised Norfolk Island - At 10.30 lowered the waste boat and went on shore - Very high sea - great breakers in the reef

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
„ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom.,
Thermom., Air,
„ Sea,
Current,
Drift,
Wind,
„ Force,
Sea,
Weather,

10th Week.]

SATURDAY, 9th MARCH, 1907.

[68-297.]

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 4° 50' 4"	{ Appt. Noon, 4 49 53 }	Var. 1 Hour, 58° 50"	Equation of Time, decreasing,		Var. 1 Hour, 0° 02' 1s.	Sun's Semi-Diam., 16' 8"	Sidereal Time, 23h 4m 6° 22s.
					Sub. from Mean Time, 10m 55° 26s.	Add to Appt. Time, 10 55° 15			

Ship laying off and on - Norfolk Island - Left and rode on shore Mr. Martin came off for a hour or so - Mr. Gibbons came off in the P.M. remained on shore until Sunday morning -

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
„ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom.,
Thermom., Air,
„ Sea,
Current,
Drift,
Wind,
„ Force,
Sea,
Weather,

Ship lay ing off and on, at
Laysan Island
Mpte (2nd ^{mor}) and boats crew
came off but found it too
rough th came inside reef.

Barom.,
Thermom., Air,
,, Sea,
Current,
Drift,
Wind,
,, Force,
Sea,
Weather,

Ship paying off and on
York Island.
Boat came in and
took off provisions.
Also Mr. Gibb's suit off
to the ship.

Barom.,
Thermom., Air,
 ,, Sea,
Current,
Drift,
Wind,
 ,, Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{	Mean Noon, S	3° 39' 38"	{	Var. 1 Hour,	Equation of Time, decreasing,			{	Var. 1 Hour,	Sun's Semi-Diam., 16' 7"	Sidereal Time, 23h 15m 55.88s.
							Sub. from Mean Time, 10m	9.01s.	Add to				

Ship leaving off and on at Longfellow Island.
Boat came off for provisions
Mr. Martin came on shore for a visit.

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom.,
Thermom., Air,
" Sea,
Current,
Drift,
Wind,
" Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{	Mean Noon, S	3° 16' 0"	{	Var. 1 Hour,	Equation of Time, decreasing,			{	Var. 1 Hour,	Sun's Semi-Diam., 16' 7"	Sidereal Time, 23h 19m 52.43s.
							Sub. from Mean Time, 9m	52.96s.	Add to				

Ship leaving off and on at Longfellow Island
Boat came off for provisions -

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom.,
Thermom., Air,
" Sea,
Current,
Drift,
Wind,
" Force,
Sea,
Weather,

NAUT. EPHEMERIS,	Sun's Declination, decreasing,	{ Mean Noon, S 2° 52' 23" } { Appt. Noon, 2 52 13 }	Var. 1 Hour, 59'10"	Equation of Time, decreasing.		Var. 1 Hour, 0'687s.	Sun's Semi-Diam., 16' 7"	Sidereal Time, 23h 23m 48'08s.
				Sub. from Mean Time, 9m 36'62s.	Add to Appt. Time, 9 36'51			

Ship laying off and on
at 10.30 P.M. Boat came
9.30, all hands came
to go aboard ship.
2.30 started for the ship -
ship headed in -
Capt and wife, and all
hands on board - headed
for sea.
All hands well.

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
„ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom.,
Thermom., Air,
„ Sea,
Current,
Drift,
Wind,
„ Force,
Sea,
Weather,

NAUT. EPHEMERIS,	Sun's Declination, decreasing,	{ Mean Noon, S 2° 28' 43" } { Appt. Noon, 2 28 34 }	Var. 1 Hour, 59'17"	Equation of Time, decreasing.		Var. 1 Hour, 0'698s.	Sun's Semi-Diam., 16' 6"	Sidereal Time, 23h 27m 45'54s.
				Sub. from Mean Time, 9m 20'00s.	Add to Appt. Time, 9 19'59			

Lat. by Obs., *30-36*
Long. by Obs., *169-08*
Course by Obs.,
Distance by Obs.,
„ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom.,
Thermom., Air,
„ Sea,
Current,
Drift,
Wind,
„ Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, <i>decreasing</i> ,	{	Mean Noon, S	2° 5' 2"	}	Var. 1 Hour,	59.22"	{	Equation of Time, <i>decreasing</i> ,		}	Var. 1 Hour,	0.708s.	Sun's Semi-Diam.,	16' 6"	Sidereal Time,
									Sub. from Mean Time,	9m 3.13s.						
									Add to	Appt. Time,	9	3.02				

Lat. by Obs., *31-45*
Long. by Obs., *170-05*
Course by Obs.,
Distance by Obs.,
„ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.,

Barom.,
Thermom., Air,
„ Sea,
Current,
Drift,
Wind,
„ Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, <i>decreasing</i> ,	{	Mean Noon, S	1° 41' 20"	}	Var. 1 Hour,	59.26"	{	Equation of Time, <i>decreasing</i> ,		}	Var. 1 Hour,	0.718s.	Sun's Semi-Diam.,	16' 6"	Sidereal Time,
									Sub. from Mean Time,	8m 46.01s.						23h 35m 38.64s.

Lat. by Obs., *32-35*
Long. by Obs., *172-10*
Course by Obs.,
Distance by Obs.,
„ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.,

Barom.,
Thermom., Air,
„ Sea,
Current,
Drift,
Wind,
„ Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 1° 17' 37" } { Appt. Noon, 1 17 29 }	Var. 1 Hour, 59 27"	Equation of Time, decreasing. Sub. from Mean Time, 8m 28.67s. Add to Appt. Time, 8 28.67 }	Var. 1 Hour, 0.727s.	Sun's Semi-Diam., 16' 5"	Sidereal Time, 23h 39m 35.19s.

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S 0° 53' 54" } Appt. Noon, 0 53 46 }	Var. 1 Hour, 59' 28"	{ Equation of Time, decreasing, Sub. from Mean Time, 8m 11' 13s. } Add to Appt. Time, 8 11' 03 }	Var. 1 Hour, 0' 735s.	Sun's Semi-Diam., 16' 5"	Sidereal Time, 23h 43m 31.75s.

NAUT. EPHEMERIS, {	Sun's Declination, <i>decreasing</i> ,	{	Mean Noon, S 0° 30' 11"	{	Appt. Noon, 0 30 3	Var. 1 Hour, 59.27 ^a	Equation of Time, <i>decreasing</i> ,		Var. 1 Hour, 0.742s.	Sun's Semi-Diam., 16' 5"	Sidereal Time, 23h 47m 28.30s.
							Sub. from Mean Time, 7m 53.40s.				
							Add to Appt. Time, 7 53.30				

Lat. by Obs., *31-31*
Long. by Obs., *175-38*
Course by Obs.,
Distance by Obs.,
„ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom.,
Thermom., Air,
„ Sea,
Current,
Drift,
Wind,
„ Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, <i>decreasing</i> ,	{	Mean Noon, S 0° 6' 28"	{	Appt. Noon, 0 6 21	Var. 1 Hour, 59.25"	Equation of Time, <i>decreasing</i> ,		Var. 1 Hour, 0.749s.	Sun's Semi-Diam., 16' 5"	Sidereal Time, 23h 51m 24.85s.
							Sub. from Mean Time, 7m 35.51s.				
							Add to Appt. Time, 7 35.41				

Lat. by Obs., *30-3-7*
Long. by Obs., *176-10*
Course by Obs.,
Distance by Obs.,
„ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom.,
Thermom., Air,
„ Sea,
Current,
Drift,
Wind,
„ Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, N 0° 17' 14"	{ Appt. Noon, 0 17 21 }	Var. 1 Hour, 59-21"	Equation of Time, decreasing,		Var. 1 Hour, 0-754s.	Sun's Semi-Diam., 16' 4"	Sidereal Time, 23h 55m 21-40s.
					Sub. from Mean Time, 7m 17-40s.	Add to Appt. Time, 7 17-37 }			

Lat. by Obs., *30-13-*
Long. by Obs., *176-26*
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom.,
Thermom., Air,
" Sea,
Current,
Drift,
Wind,
" Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, N 0° 40' 55"	{ Appt. Noon, 0 41 1 }	Var. 1 Hour, 59-15"	Equation of Time, decreasing,		Var. 1 Hour, 0-759s.	Sun's Semi-Diam., 16' 4"	Sidereal Time, 23h 59m 17-95s.
					Sub. from Mean Time, 6m 59-30s.	Add to Appt. Time, 6 59-21 }			

Lat. by Obs., *28-30*
Long. by Obs., *176-40*
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom.,
Thermom., Air,
" Sea,
Current,
Drift,
Wind,
" Force,
Sea,
Weather,

Nautical Diary and Day's Work Book,A. Hicksfrom Norfolk Island

13th Week.]SUNDAY, 24th MARCH, 1907. (Palm Sunday).[83-282.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N 1° 4' 34" } Var. 1 Hour, { Equation of Time, decreasing, } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, increasing, { Appt. Noon, 1 4 40 } 59'08" Sub. from Mean Time, 6m 41'03s. } 0'763s. 16' 4" 0h 3m 14'51s. Add to Appt. Time, 6 40'94 }

Lat. by Obs., 28-22
Long. by Obs., 177-31
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom.,
Thermom., Air,
" Sea,
Current,
Drift,
Wind,
" Force,
Sea,
Weather,

13th Week.]MONDAY, 25th MARCH, 1907.[84-281.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N 1° 28' 11" } Var. 1 Hour, { Equation of Time, decreasing, } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, increasing, { Appt. Noon, 1 23 17 } 53'99" Sub. from Mean Time, 6m 22'67s. } 0'766s. 16' 4" 0h 7m 11'06s. Add to Appt. Time, 6 22'59 }

Lat. by Obs., 28-38
Long. by Obs., 177-10
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom.,
Thermom., Air,
" Sea,
Current,
Drift,
Wind,
" Force,
Sea,
Weather,

[85-280.]

Barom.,
Thermom., Air,
 ,, Sea,
Current,
Drift,
Wind,
 ,, Force,
Sea,
Weather,

[86-279.]

Barom.,
Thermom., Air,
 " Sea,
Current,
Drift,
Wind,
 " Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, <i>increasing,</i>	{	Mean Noon, N 2° 38' 48"	{	Var. 1 Hour, 58' 65"	{	Equation of Time, <i>decreasing,</i>		{	Var. 1 Hour, 0' 769s.	Sun's Semi-Diam., 16' 3"	Sidereal Time, 0h 19m 0' 71s.
							Sub. from Mean Time, 5m 27' 34s. Add to Appt. Time, 5 27' 26"					

Lat. by Obs., 30-43-
Long. by Obs., 178-49
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom.,
Thermom., Air,
" Sea,
Current,
Drift,
Wind,
" Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, <i>increasing,</i>	{	Mean Noon, N 3° 2' 14"	{	Var. 1 Hour, 58' 51"	{	Equation of Time, <i>decreasing,</i>		{	Var. 1 Hour, 0.768s.	Sun's Semi-Diam., 16' 3"	Sidereal Time, 0h 22m 57.27s.
							Sub. from Mean Time, 5m 8' 87s. Add to Appt. Time, 5 8' 81					

Lat. by Obs., 31-18
Long. by Obs., 180-42 1/2
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom.,
Thermom., Air,
" Sea,
Current,
Drift,
Wind,
" Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{	Mean Noon, N 3° 25' 37"	{	Appt. Noon, 3 25 42	{	Var. 1 Hour, 58.35"	{	Equation of Time, decreasing, Sub. from Mean Time, 4m 50.44s, Add to Appt. Time, 4 50.38	{	Var. 1 Hour, 0.767s.	{	Sun's Semi-Diam., 16' 2"	{	Sidereal Time, 0h 26m 53.82s.
												Lat. by Obs., 31-24			
												Long. by Obs., 177-55			
												Course by Obs.,			
												Distance by Obs.,			
												,, by Log,			
												Var. used,			
												Dev. used,			
												Steaming Time, h. m.,			
												Average Speed, knots 10ths,			
												Barom.,			
												Thermom., Air,			
												,, Sea,			
												Current,			
												Drift,			
												Wind,			
												,, Force,			
												Sea,			
												Weather,			

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{	Mean Noon, N 3° 48' 56"	{	Appt. Noon, 3 49 0	{	Var. 1 Hour, 58.18"	{	Equation of Time, decreasing, Sub. from Mean Time, 4m 32.07s. Add to Appt. Time, 4 32.01	{	Var. 1 Hour, 0.764s.	{	Sun's Semi-Diam., 16' 2"	{	Sidereal Time, 0h 30m 50.37s.

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, N 4° 12' 11" } Appt. Noon, 4 12 15 }	Var. 1 Hour, 58° 00"	Equation of Time, decreasing,		Var. 1 Hour, 0° 760s.	Sun's Semi-Diam., 16' 2"	Sidereal Time, 0h 34m 46° 92s.
				Sub. from Mean Time, 4m 13° 77s.	Add to Appt. Time, 4 13 72 }			

Lat. by Obs., *31-08*
Long. by Obs., *177-09*
Course by Obs.,
Distance by Obs.,
„ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.,

Barom.,
Thermom., Air,
„ Sea,
Current,
Drift,
Wind,
„ Force,
Sea, ☉
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, N 4° 35' 21" } Appt. Noon, 4 35 24 }	Var. 1 Hour, 57° 80"	Equation of Time, decreasing,		Var. 1 Hour, 0° 755s.	Sun's Semi-Diam., 16' 1"	Sidereal Time, 0h 38m 43° 48s.
				Sub. from Mean Time, 3m 55° 58s.	Add to Appt. Time, 3 55 53 }			

*Cruising on French Rock
making ground*

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
„ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.,

Barom.,
Thermom., Air,
„ Sea,
Current,
Drift,
Wind,
„ Force,
Sea, ☉
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{	Mean Noon, N 4° 58' 26"	{	Appt. Noon, 4 58 29	{	Var. 1 Hour, 57.59"	{	Equation of Time, decreasing, Sub. from Mean Time, 3m 37.51s. Add to Appt. Time, 3 37.46	{	Var. 1 Hour, 0.750s.	Sun's Semi-Diam., 16' 1"	Sidereal Time, 0h 42m 40.03s.

Cruising on French Rock
whaling ground

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
 „ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom.,
Thermom., Air,
 „ Sea,
Current,
Drift,
Wind,
 „ Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{	Mean Noon, N 5° 21' 26"	{	Appt. Noon, 5 21 29	{	Var. 1 Hour, 57.37"	{	Equation of Time, decreasing, Sub. from Mean Time, 3m 19.58s. Add to Appt. Time, 3 19.54	{	Var. 1 Hour, 0.743s.	Sun's Semi-Diam., 16' 1"	Sidereal Time, 0h 46m 36.58s.

Cruising on French Rock
whaling ground

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
 „ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom.,
Thermom., Air,
 „ Sea,
Current,
Drift,
Wind,
 „ Force,
Sea, c
Weather,

NAUT. EPHEMERIS, {	{ Sun's Declination, increasing,	{ Mean Noon, N 5° 44' 20"	{ Appt. Noon, 5 44 23 }	{ Var. 1 Hour, 57.13"	Equation of Time, decreasing,		{ Var. 1 Hour, 0.733s.	Sun's Semi-Diam., 16' 1"	Sidereal Time, 0h 50m 33.13s.
					Sub. from Mean Time, 3m 1.83s.				
					Add to Appt. Time, 3 1.79				

Cruising on French Rock
whaling ground

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
 " by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom.,
Thermom., Air,
 " Sea,
Current,
Drift,
Wind,
 " Force,
Sea, ☉
Weather,

NAUT. EPHEMERIS, {	{ Sun's Declination, increasing,	{ Mean Noon, N 6° 7' 8" } { Appt. Noon, 6 7 11 }	{ Var. 1 Hour, 56.88" }	Equation of Time, decreasing,		{ Var. 1 Hour, 0.728s. }	Sun's Semi-Diam., 16' 0"	Sidereal Time, 0h 54m 29.69s.
				Sub. from Mean Time, 2m 44.27s.				
				Add to Appt. Time, 2 44.23				

Cruising on French Rock
whaling ground

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
 " by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom.,
Thermom., Air,
 " Sea,
Current,
Drift,
Wind,
 " Force,
Sea, ☉
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, <i>increasing,</i>	{ Mean Noon, N 6° 29' 51"	{ Appt. Noon, 6 29 53 }	Var. 1 Hour, 56' 61"	Equation of Time, <i>decreasing,</i>		Var. 1 Hour, 0.719s.	Sun's Semi-Diam., 16' 0"	Sidereal Time, 0h 58m 26.24s.
					Sub. from Mean Time, 2m 26.90s. Add to Appt. Time, 2 26.87 }				

beginning on French God
whaling ground -
6.30 AM, raised what they
thought was whals - not certain

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
 „ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom.,
Thermom., Air,
 „ Sea,
Current,
Drift,
Wind,
 „ Force,
Sea, :
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, <i>increasing,</i>	{ Mean Noon, N 6° 52' 27"	{ Appt. Noon, 6 52 29 }	Var. 1 Hour, 56' 33"	Equation of Time, <i>decreasing.</i>		Var. 1 Hour, 0.709s.	Sun's Semi-Diam., 16' 0"	Sidereal Time, 1h 2m 22.79s.
					Sub. from Mean Time, 2m 9.70s. Add to Appt. Time, 2 9.73 }				

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
 „ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom.,
Thermom., Air,
 „ Sea,
Current,
Drift,
Wind,
 „ Force,
Sea,
Weather,

Nautical Diary and Day's Work Book, from to

15th Week.]

THURSDAY, 11th APRIL, 1907.

[101-264.]

NAUT. EPHEMERIS,	{ Sun's Declination, increasing,	{ Mean Noon, N 7° 59' 31" Appt. Noon, 7 59 32 }	Var. 1 Hour, 55' 40"	Equation of Time, <i>decreasing</i> , Sub. from Mean Time, 1m 19' 30s. Add to Appt. Time, 1m 19' 7"	Var. 1 Hour, 0' 677s.	Sun's Semi-Diam., 15' 59"	Sidereal Time, 1h 14m 12' 45s.
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Lat. by Obs.,

Long. by Obs.,

Course by Obs.,

Distance by Obs.,

„ by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.,

Barom.,

Thermom., Air,

Sea,

Current,

Drift,

Wind,

„ Force,

Sea, 5

Weather,

15th Week.]

FRIDAY, 12th APRIL, 1907.

[102-263.]

NAUT. EPHEMERIS,	{ Sun's Declination, increasing,	{ Mean Noon, N 8° 21' 37" Appt. Noon, 8 21 38 }	Var. 1 Hour, 55' 06"	Equation of Time, decreasing, Sub. from Mean Time, 1m 3' 69s. Add to Appt. Time, 1 3' 68	Var. 1 Hour, 0' 66s.	Sun's Semi-Diam., 15' 59"	Sidereal Time, 1h 13m 9' 00s.
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Lat. by Obs.,

Long. by Obs.,

Course by Obs.,

Distance by Obs.,

by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.,

Barom.,

Thermom., Air,

„ Sea,

Current,

Drift,

Wind,

29 Force,

Sea,

Weather,

NAUT. EPHEMERIS, {	Sun's Declination, <i>increasing,</i>	{ Mean Noon, N 8° 43' 34"	{ Var. 1 Hour, 54.71"	{ Equation of Time, <i>decreasing,</i> Sub. from Mean Time, 0m 47.87s. Add to Appt. Time, 0 47.86	{ Var. 1 Hour, 0.653s.	Sun's Semi-Diam., 15' 58"	Sidereal Time, 1h 22m 5.66s.

Nautical Diary and Day's Work Book,		from	to	
16th Week.]		WEDNESDAY, 17th APRIL, 1907.		[107-258.]
NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N10° 9' 54" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, Sun's Semi-Diam., Sidereal Time, increasing, { Appt. Noon, 10 9 54 } 53.13" Add to Mean Time, 0m 12.26s. Sub. from Appt. Time, 0 12.26 } 0.598s. 15' 57" 1h 37m 51.77s.				
		Lat. by Obs., Long. by Obs., Course by Obs., Distance by Obs., ,, by Log, Var. used, Dev. used,		
		Steaming Time, h. m., Average Speed, knots roths.,		
		Barom., Thermom., Air, ,, Sea, Current, Drift, Wind, ,, Force, Sea, Weather,		

16th Week.]		THURSDAY, 18th APRIL, 1907.		[108-257.]
NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N10° 31' 4" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, Sun's Semi-Diam., Sidereal Time, increasing, { Appt. Noon, 10 31 4 } 52.71" Add to Mean Time, 0m 26.43s. Sub. from Appt. Time, 0 26.43 } 0.583s. 15' 57" 1h 41m 48.32s.				
		Lat. by Obs., Long. by Obs., Course by Obs., Distance by Obs., ,, by Log, Var. used, Dev. used,		
		Steaming Time, h. m., Average Speed, knots roths.,		
		Barom., Thermom., Air, ,, Sea, Current, Drift, Wind, ,, Force, Sea, Weather,		

NAUT. EPHEMERIS, {	Sun's Declination, <i>increasing,</i>	{	Mean Noon, N10° 52' 4"	{	Appt. Noon, 10 52 4 }	Var. 1 Hour, 52-27"	Equation of Time, <i>increasing,</i>		Var. 1 Hour, 0-567s.	Sun's Semi-Diam., 15' 57"	Sidereal Time, 1h 45m 44-88s.
							Add to Mean Time, 0m 40-23s.				
							Sub. from Appt. Time, 0 40-23				

Lat. by Obs.,

Long. by Obs.,

Course by Obs.,

Distance by Obs.,

„ by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots roths.,

Barom.,

Thermom., Air,

„ Sea,

Current,

Drift,

Wind,

„ Force,

Sea,

Weather,

NAUT. EPHEMERIS, {	Sun's Declination, <i>increasing,</i>	{	Mean Noon, N11° 12' 54"	{	Appt. Noon, 11 12 53 }	Var. 1 Hour, 51-81"	Equation of Time, <i>increasing,</i>		Var. 1 Hour, 0-551s.	Sun's Semi-Diam., 15' 57"	Sidereal Time, 1h 49m 41-43s.
							Add to Mean Time, 0m 53-65s.				
							Sub. from Appt. Time, 0 53-65				

Lat. by Obs.,

Long. by Obs.,

Course by Obs.,

Distance by Obs.,

„ by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots roths.,

Barom.,

Thermom., Air,

„ Sea,

Current,

Drift,

Wind,

„ Force,

Sea,

Weather,

Nautical Diary and Day's Work Book,		from	to	
17th Week.]		SUNDAY, 21st APRIL, 1907. (3rd Sunday after Easter.)		[111-254.]
NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N11° 33' 32" } Var. 1 Hour, { Equation of Time, increasing, { Add to Mean Time, 1m 6.68s. } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, increasing, { Appt. Noon, 11 33 31 } 51.34" { Sub. from Appt. Time, 1 6.63 } 0.534s. 15' 56" 1h 53m 37.98s.				
		Lat. by Obs.,		
		Long. by Obs.,		
		Course by Obs.,		
		Distance by Obs.,		
		,, by Log,		
		Var. used,		
		Dev. used,		
		Steaming Time, h. m.,		
		Average Speed, knots 10ths,		
		Barom.,		
		Thermom., Air,		
		,, Sea,		
		Current,		
		Drift,		
		Wind,		
		,, Force,		
		Sea,		
		Weather,		

17th Week.]		MONDAY, 22nd APRIL, 1907.		[112-253.]
NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N11° 53' 58" } Var. 1 Hour, { Equation of Time, increasing, { Add to Mean Time, 1m 19.30s. } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, increasing, { Appt. Noon, 11 53 57 } 50.85" { Sub. from Appt. Time, 1 19.29 } 0.517s. 15' 56" 1h 57m 34.54s.				
		Lat. by Obs.,		
		Long. by Obs.,		
		Course by Obs.,		
		Distance by Obs.,		
		,, by Log,		
		Var. used,		
		Dev. used,		
		Steaming Time, h. m.,		
		Average Speed, knots 10ths,		
		Barom.,		
		Thermom., Air,		
		,, Sea,		
		Current,		
		Drift,		
		Wind,		
		,, Force,		
		Sea,		
		Weather,		

NAUT. EPHEMERIS, {	Sun's Declination, <i>increasing,</i>	{	Mean Noon, N12° 14' 13"	{	Appt. Noon, 12 14 12 }	Var. 1 Hour, 50'35"	Equation of Time, <i>increasing,</i>		Var. 1 Hour, 0'499s.	Sun's Semi-Diam., 15' 56"	Sidereal Time, 2h 1m 31'09s.
							Add to Mean Time, 1m 31'49s.				
							Sub. from Appt. Time, 1 31'48				

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
 " by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom.,
Thermom., Air,
 " Sea,
Current,
Drift,
Wind,
 " Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, <i>increasing,</i>	{	Mean Noon, N12° 34' 15"	{	Appt. Noon, 12 34 14 }	Var. 1 Hour, 49'84"	Equation of Time, <i>increasing,</i>		Var. 1 Hour, 0'480s.	Sun's Semi-Diam., 15' 55"	Sidereal Time, 2h 5m 27'64s.
							Add to Mean Time, 1m 43'26s.				
							Sub. from Appt. Time, 1 43'24				

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
 " by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom.,
Thermom., Air,
 " Sea,
Current,
Drift,
Wind,
 " Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, <i>increasing</i> ,	{ Mean Noon, N12° 54' 6" } Appt. Noon, 12 54 4 }	Var. 1 Hour, 49 32"	Equation of Time, <i>increasing</i> , Add to Mean Time, 1m 54.57s. Sub. from Appt. Time, 1 54.55 }	Var. 1 Hour, 0.462s.	Sun's Semi-Diam., 15' 55"	Sidereal Time, 2h 9m 24.20s.
						Lat. by Obs.,	
						Long. by Obs.,	
						Course by Obs.,	
						Distance by Obs.,	
						„ by Log,	
						Var. used,	
						Dev. used,	
		</					

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N13° 33' 7" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, }
increasing, { Appt. Noon, 13 33 5 } 48°23' Add to Mean Time, 2m 15.79s. } 0°422s. 15' 55" 2h 17m 17.31s.

At 6.45 A.M. raised
whales - at 8.30 lowered
fur trap -
Marty struck one whale -
which gave him a long
chase - while chasing this
whale - raised up whale
laying still on the top of the
water signalled two boats
which gave chase -
Mr. Thurstun struck his
papted, Mr. Eurs struck him
then both boats got fast
at 8.35 had lost whale
just along side of ship
shortly after struck sails, for
the night -
all hands had supper
set the matches for the
night -
So ends this day -
all well.

Lat. by Obs., 25°-40
Long. by Obs., 175°-33
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 16°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 30.1

Thermom., Air,

" Sea,

Current,

Drift,

Wind,

" Force, N. E.

Sea, smooth

Weather, good

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N13° 52' 18" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, }
increasing, { Appt. Noon, 13 52 16 } 47°66" Add to Mean Time, 2m 25.67s. } 0°401s. 15' 55" 2h 21m 13.86s.

This day comes in cloudy
with light breeze - Ship
under short sail - all
hands employed in cutting
in whales - at noon had
me out in and in dick -
all hands had dinner this
P.M. cut in other whale at
5. P.M. finished cutting
in other whale - made
the heads fast for the night
all hands had supper -
after supper, got the try
butter ready, started putting
butter
Set matches for the night
So ends this day - all
well -

Kapt. gave Manuel
Lardana, boat store
gold prize for
loyalty.

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom.,

Thermom., Air,

" Sea,

Current,

Drift,

Wind,

" Force,

Sea,

Weather,

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, N14° 11' 15" {	Var. 1 Hour, {	Equation of Time, increasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	increasing,	Appt. Noon, 14 11 13 {	47' 09" {	Add to Mean Time, 2m 35' 04s. {	0' 380s. {	15' 54" {	2h 25m 10' 41s. {
				Sub. from Appt. Time, 2 35' 03 {			

This day commences with fine weather and continues so through out the day. At 6 A.M. had breakfast looked on to the heads took them in and figured out 13 noon put cases and board. Sent Out watch blow Star board watch employed in cutting the thr and trying out Capt and second mate employed in forward hole. So ends this day. All well. Pumps and light carefully attended -

Lat. by Obs., 25-45
Long. by Obs., 175-23
Course by Obs.,
Distance by Obs.,
,, by Log,
Var. used, 110
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 29-90
Thermom., Air,
,, Sea,
Current,
Drift,
Wind, S E.
,, Force, light
Sea, smooth
Weather, good.

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, N14° 29' 59" {	Var. 1 Hour, {	Equation of Time, increasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	increasing,	Appt. Noon, 14 29 56 {	46' 50" {	Add to Mean Time, 2m 43' 90s. {	0' 358s. {	15' 54" {	2h 29m 6' 97s. {
				Sub. from Appt. Time, 2 43' 88 {			

This day comes in clear with strong breeze. Ship under short sail trying out oil. Capt and second mate employed in stowing down oil. At 6 P.M. had a heavy rain squall put the fires out, and light also. At 1 A.M. Mr. Thurston called the Capt. as one of the crew, Mr. Bluffton, cut his first night watch - quite badly. So ends this day. Harry Green man, cut.

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
,, by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 29.80
Thermom., Air,
,, Sea,
Current,
Drift,
Wind, N.
,, Force, strong
Sea, rough
Weather, moderate fair.

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, N14° 48' 27"	Var. 1 Hour, {	Equation of Time, increasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	increasing, {	Appt. Noon, 14 48 25	45-90"	Add to Mean Time, 2m 52-23s.	0-335s.	15' 54"	2h 33m 3-52s.
				Sub. from Appt. Time, 2 52-20			

This day commences with a fresh breeze from the N. E. - first and middle part of day - later part calm - Employed in trying out - and storing oil - At 12 P.M. last night H. Gun out his foot - quite badly - Capt put two sticks in it and put him below - gave him a large dose of salts - this A.M. At 1 P.M. rolled 17-chickeys -

So ends this day -

Pumps and light carefully attended -

Stowed down in fore hold - 86 lbs and 12 1/2 gals of oil -

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 11°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 29.90
Thermom., Air,
" Sea,
Current,
Drift,
Wind, N. E.
" Force,
Sea, smooth
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, N15° 6' 42"	Var. 1 Hour, {	Equation of Time, increasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	increasing, {	Appt. Noon, 15 6 40	45-29"	Add to Mean Time, 2m 59-99s.	0-312s.	15' 54"	2h 37m 0-08s.
				Sub. from Appt. Time, 2 59-97			

This day comes in with fair weather - first part day calm - later part light air from the N. E. - At 1 P.M. set topsails, first part of day employed in washing and chauling decks, and storing oil -

This P.M. stowed 1533 gals of oil -

Finished at mid night - Purvised F. Mizon for staking 5 yds canvas & out of sail pen - Man with sore foot improving - So ends this day all well -

Caught four Abaco

Oil stowed down - all told 136 lbs - 21 1/2 gals

Lat. by Obs., 24-55
Long. by Obs., 175-07
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 10°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.05
Thermom., Air,
" Sea,
Current,
Drift,
Wind, N. E.
" Force,
Sea, smooth
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, N15° 24' 41" } Appt. Noon, 15 24 39	{ Var. 1 Hour, 44' 66" }	{ Equation of Time, increasing, Add to Mean Time, 3m 7' 20s. Sub. from Appt. Time, 3 7' 19 }	{ Var. 1 Hour, 0' 239s. }	Sun's Semi-Diam., 15' 53"	Sidereal Time, 2h 40m 56' 63s.

This day commences with fine weather and light breeze from the North - At day light made sail and stood on the port tack 6.45. A.M. raised fire huck.

Large number of fish & sharks arrived ship & caught several small abbacon -

Capt. caught ~~an~~ security pruned abbacon.

Dressed main's fore foot and it looked quite well.

At 10. A.M. started E.S.E. at 12.30 P.M. stopped S.

At 5. P.M. shortened sail for the night. quite a heavy rain squall.

6. P.M. came to on the starboard tack, heading West.

6. P.M. dead calm.

So ends this day - all well.

Lat. by Obs., 25-14

Long. by Obs.,

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots faths.

Barom.,

Thermom., Air,

,, Sea,

Current,

Drift,

Wind,

,, Force,

Sea, @

Weather,

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, N15° 42' 26" } Appt. Noon, 15 42 23	{ Var. 1 Hour, 44' 02" }	{ Equation of Time, increasing, Add to Mean Time, 3m 13' 86s. Sub. from Appt. Time, 3 13' 84 }	{ Var. 1 Hour, 0' 265s. }	Sun's Semi-Diam., 15' 53"	Sidereal Time 2h 44m 53' 19s.

This day commences with light airs and calm. At daylight made sail, stood on port tack all day. No storage was.

Harvey employed in making the sail yard.

Wate making that sail - Capt making main Royal

Man employed about the deck and in the rigging

Caught several fatfish and four rudders fish - Killed two pigs

At P.M. washed the ho - mast heads up from day

light until dark.

run and light - carefully attended.

Harry Green still off duty with gun fort. - fort. working nicely.

So ends this day - all well.

Lat. by Obs., 25-31

Long. by Obs.,

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots faths.

Barom.,

Thermom., Air,

,, Sea,

Current,

Drift,

Wind,

,, Force,

Sea, @

Weather,

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, N15° 59' 55"	Var. 1 Hour, {	Equation of Time, increasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	increasing, {	Appt. Noon, 15 59 52	43.37"	Add to Mean Time, 3m 19.94s. {	0.241s. {	15' 53"	2h 48m 49.74s.
				Sub. from Appt. Time, 3 19.92			

This day commences with rain, and strong breeze, from the N. E. -
 At daylight set foresail and jib
 At 8. A. M. furled foresail and jib
 At 9.30 A. M. had heavy rain squall, wind hauled to the west -
 10.30, steered N. E.; set the jib
 12.30 steered E.
 4. P. M. heaved to on the star board tack, heading S. x E. Mast hauled up for day light, until dark
 Caught fifteen or twenty abalone
 Dressed H. Green's foot found he had hit or stepped on a sand trap the stitches not other than that of a cork sole.
 So ends this day - all well

Lat. by Obs., 25-24
 Long. by Obs., 173-52
 Course by Obs.,
 Distance by Obs.,
 " by Log,
 Var. used, 11°
 Dev. used,
 Steaming Time, h. m.,
 Average Speed, knots 10ths.,
 Barom., 29.85
 Thermom., Air,
 " Sea,
 Current,
 Drift,
 Wind, variable strong
 " Force,
 Sea, rough
 Weather, cloudy

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, N16° 17' 8"	Var. 1 Hour, {	Equation of Time, increasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	increasing, {	Appt. Noon, 16 17 5	42.71"	Add to Mean Time, 3m 25.44s. {	0.217s. {	15' 53"	2h 52m 46.30s.
				Sub. from Appt. Time, 3 25.43			

Commences with a gale of wind from S. E. - Ship under full sail on star board tack
 Mate employed in making boat sail Capt. making Royal. Best of crew employed in mending their clothes.
 Caught a few fish -
 Harry Green's foot just about the same.
 At 2.30 P. M. wind hauled to S. E. and anchored up.
 Mast hauled back up.
 Men down put ship on the port tack under short sail -
 Pumps and lights carefully attended, so ends this day -
 all well.

Lat. by Obs., 25-55
 Long. by Obs., 173-53
 Course by Obs.,
 Distance by Obs.,
 " by Log,
 Var. used, 11°
 Dev. used,
 Steaming Time, h. m.,
 Average Speed, knots 10ths.,
 Barom., 29.80.
 Thermom., Air,
 " Sea,
 Current,
 Drift,
 Wind, S. E.
 " Force, strong
 Sea, rough
 Weather, bad

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, N16° 34' 5" {	Var. 1 Hour, {	Equation of Time, increasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	increasing,	Appt. Noon, 16 34 2 {	42' 03" {	Add to Mean Time, 3m 30' 37s. {	0' 193s. {	15' 52" {	2h 56m 42' 85s. {
				Sub. from Appt. Time, 3 30' 35 {			

Commenced with fine
master light breeze from E. S. E.
at day light made sail stow
ing H. S. D. J.
Carpenter at work on topsail
yard. Men employed in maul-
ing blocks, and other odd jobs on
deck.
Mate, mending on boat sail
Carpenter mending main Royal
also patcht four large patches
several other patches caught
by crew during day.
At 2.30 had light rain
squall. Luffed on port tack
headwinds S. S. E.
At 4.00 down shortened
down sail on port tack.
H. Green off duty with sore
foot, not much improvement.
Mast head up from day
light until dark. Pumps and
light carefully attended.
Sends this day - all well

Lat. by Obs., 25-52
Long. by Obs., 174-52
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 11°
Dev. used,
Steaming Time, h. m.,
Average Speed, knots 10ths.,
Barom., 30-1
Thermom., Air,
" Sea,
Current,
Drift,
Wind, E. S. E.
" Force, light
Sea, a
Weather, ruggid
good

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, N16° 50' 45" {	Var. 1 Hour, {	Equation of Time, increasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	increasing,	Appt. Noon, 16 50 43 {	41' 34" {	Add to Mean Time, 3m 34' 71s. {	0' 169s. {	15' 52" {	3h 0m 39' 41s. {
				Sub. from Appt. Time, 3 34' 70 {			

This day had strong breeze
E. N. E. - ship on starboard tack
under four topsails and storm
stay sails.
Mate employed in making
boat sail, Capt making main
royal.
4.30 P. M. took in fore top-
sail.
This A. M. broke out water and
cleaned tanks.
Carpenter employed making
jibed strop.
At 6 P. M. wore ship xance
to on the port tack in the night.
Hinge flopping hard.
Mast head up from day
light until dark.
H. Green's foot not much
improved.
Sends this day - all
well.

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 11°
Dev. used,
Steaming Time, h. m.,
Average Speed, knots 10ths.,
Barom., 30.1
Thermom., Air,
" Sea,
Current,
Drift,
Wind, E. S. E.
" Force, strong
Sea, a
Weather, ruggid
good

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, N17° 7' 9" } Appt. Noon, 17 7 6 }	Var. 1 Hour, 40' 64"	Equation of Time, increasing,		Var. 1 Hour, 0' 145s.	Sun's Semi-Diam., 15' 52"	Sidereal Time, 3h 4m 35' 96s.
				Add to	Mean Time, 3m 38' 47s.			
				Sub. from	Appt. Time, 3 38' 46"			

This day came in with a gale of wind from the East - Ship on the port tack under main topsail and storm staysails.

At 9.30 had a heavy squall, blew away the fore topmast staysail, clewed up the main topsail and furled it. Laid on the port tack under storm staysails remainder of the day. Latter part of the day more moderate.

Harry Green's fort looking very well.
So ends this day, all well.

Lat. by Obs., 25-54

Long. by Obs.,

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 10°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.,

Barom., 29-80

Thermom., Air,

,, Sea,

Current,

Drift,

Wind, Variable

,, Force, strong

Sea, rough

Weather, B. d.

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, N17° 23' 16" } Appt. Noon, 17 23 13 }	Var. 1 Hour, 39' 92"	Equation of Time, increasing,		Var. 1 Hour, 0' 120s.	Sun's Semi-Diam., 15' 52"	Sidereal Time, 3h 8m 32' 52s.
				Add to	Mean Time, 3m 41' 55s.			
				Sub. from	Appt. Time, 3 41' 54"			

This day had strong breeze and rain squalls - At day light made sail and stood on the port tack - 8.30 raised some fine birds - 10. A M. had heavy rain squall took in main topsail and jib. Engaged in clearing the fore topmast stay sail, and bending it. Eng. then engaged a other odd jobs about deck.

Harry Green's fort on the air. Caught one dolphin. Large schools of albacore seen. Mast heads up from day light until dark.
So ends this day - all well.

Lat. by Obs., 26-02

Long. by Obs., 175-10

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 11°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.,

Barom., 30.1

Thermom., Air,

,, Sea,

Current,

Drift,

Wind, N. E.

,, Force, fresh

Sea, rough

Weather, raining

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N17° 39' 5" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time,
 increasing, { Appt. Noon, 17 39 3 } 39'19" Add to Mean Time, 3m 44'24s. } 0'06s. 15' 51" 3h 12m 29'07s.
 Sub. from Appt. Time, 3 44'24 }

This day had fine weather through out the 24 hours. At day light made sail and stood on star board tack at 9 A.M. saw one fine back large school porcupus at noon plenty of fish around ship. P.M. steered S x E. Men employed at various jobs about deck. Carpenter at work on the topsail yard. Cooper employed in flagging gaskets - Left at work on Indian Royal. 3 P.M. catin boy caught two large, a black-green eye flounder, picking them - H. Green's fort unimpaired. 3.30 P.M. cleaned up deck and scrubbed - Mast heads up from daylight until dark - Swept this day all mill.

Lat. by Obs., 26-09
 Long. by Obs., 173-5-
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, 10°
 Dev. used,
 Steaming Time, h. m.,
 Average Speed, knots 10ths.,
 Barom., 30.15
 Thermom., Air,
 „ Sea,
 Current,
 Drift,
 Wind, S. by S.
 „ Force, light
 Sea, smooth
 Weather, good

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N17° 54' 37" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time,
 increasing, { Appt. Noon, 17 54 34 } 38'45" Add to Mean Time, 3m 46'26s. } 0'072s. 15' 51" 3h 16m 25'63s.
 Sub. from Appt. Time, 3 46'26 }

This day commences with fine weather and continues through out the twenty four hours. At day light made sail, stood on star board tack at 8 A.M. steered N. E. Plenty of fish around ship. caught several at 12.30 steered N. N. E. Ship yarder fill sail. This P.M. caught a number of large albacore. Mast heads up from daylight until dark - up from fore the ship to on the starboard tack, heading E x N. H. Green's fort improving. Porcupus and high cape fully attended - Swends this day - all well.

Lat. by Obs., 26-22
 Long. by Obs., 174-40
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, 11°
 Dev. used,
 Steaming Time, h. m.,
 Average Speed, knots 10ths.,
 Barom., 30.30
 Thermom., Air,
 „ Sea,
 Current,
 Drift,
 Wind, S. by S.
 „ Force, light
 Sea, smooth
 Weather, good

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N18° 9' 51" } Var. 1 Hour, { Equation of Time, increasing, { Add to Mean Time, 3m 47.71s. } Var. 1 Hour, { Sun's Semi-Diam., 15' 51" } Sidereal Time, 3h 20m 22.18s. }

This day commences with light wind and air from the south. At day light made sail - steady on the port tack heading N. X S. This A.M. took down the topsail yard, employed the remainder of the day on the main mast and track on the new yard getting it ready to put up. Signed up the old yard making chocks for oil casks. Capt at work on main Mast. H. Green's fort in morning left set him to work picking oysters. Saw fish seen today later boy caught one small one. Down down shortened sail for the night. Mast head up from day light until dark. Pumps and lights carefully attended. So ends this day - All well.

Lat. by Obs., 26-10
Long. by Obs., 174-37
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 11°
Dev. used,
Steaming Time, h. m.,
Average Speed, knots 10ths.,
Barom., 30.10
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S. light
" Force,
Sea, smooth
Weather, good

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N18° 24' 46" } Var. 1 Hour, { Equation of Time, increasing, { Add to Mean Time, 3m 48.59s. } Var. 1 Hour, { Sun's Semi-Diam., 15' 51" } Sidereal Time, 3h 24m 18.74s. }

This day commences with light airs and calms and continues so through out the day. At daylight made sail, ship heading different courses all day, no stoppage. H. Green's fort in morning left set him to work picking oysters. Saw fish seen today later boy caught one small one. Down down shortened sail for the night. Mast head up from day light until dark. Pumps and lights carefully attended. So ends this day - All well.

Lat. by Obs., 26.10
Long. by Obs., 175-03
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 11°
Dev. used,
Steaming Time, h. m.,
Average Speed, knots 10ths.,
Barom., 30.
Thermom., Air,
" Sea,
Current,
Drift,
Wind, calm
" Force, light
Sea, smooth
Weather, good

20th Week.]

WEDNESDAY, 15th MAY, 1907.

[135-230.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N18° 39' 23" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, }
 increasing, { Appt. Noon, 18 39 21 } 36-14" } Mean Time, 3m 48-90s. } Appt. Time, 3 48-90 } 0-001s. } 15' 51" } 3h 28m 15-29s.

Add to
Sub. from

This day commences with fair weather and southerly wind. At day light made sail and started. 10.30 A.M. raised me fire back. 12.30 Luffed to the wind, heading S.S.E. Men employed in overhauling the ke and sheers. Coiled the oil hose with canvas. 7 A.M. caught seventeen atbac. This P.M. saw me fire back. Plenty of fish and birds around. Mast head up from day light until dark. At day down shortened down sail for the night. H. Green is for improving nicely - all hands well.

Lat. by Obs., 25-35
 Long. by Obs., 175-33
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, 11°
 Dev. used,
 Steaming Time, h. m.,
 Average Speed, knots 10ths.,
 Barom., 29.95
 Thermom., Air,
 „ Sea,
 Current,
 Drift,
 Wind, S
 „ Force, light
 Sea, rough
 Weather, good.

20th Week.]

THURSDAY, 16th MAY, 1907.

[136-229.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N18° 53' 41" } Var. 1 Hour, { Equation of Time, decreasing, } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, }
 increasing, { Appt. Noon, 18 53 39 } 35-35" } Add to Mean Time, 3m 48-65s. } Sub. from Appt. Time, 3 48-65 } 0-022s. } 15' 50" } 3h 32m 11-55s.

This day commences with light breeze from the S.S.E. - At day light made sail in the S.S.E. and laid back heading S.S.E. 7.30 A.M. started. 10.30 A.M. raised me fire back. 12.30 Luffed to the wind, heading S.S.E. Men employed in overhauling the ke and sheers. Coiled the oil hose with canvas. 7 A.M. caught seventeen atbac. This P.M. saw me fire back. Plenty of fish and birds around. Mast head up from day light until dark. At day down shortened down sail for the night. H. Green is for improving nicely - all hands well.

Lat. by Obs., 25-04
 Long. by Obs., 175-24
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, 11°
 Dev. used,
 Steaming Time, h. m.,
 Average Speed, knots 10ths.,
 Barom., 29.95
 Thermom., Air,
 „ Sea,
 Current,
 Drift,
 Wind, West
 „ Force, light
 Sea, rough
 Weather, good.

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, N19° 7' 40"	{ Appt. Noon, 19 7 37 }	Var. 1 Hour, 34' 55"	Equation of Time, decreasing.		Var. 1 Hour, 0' 04.5s.	Sun's Semi-Diam., 15' 50"	Sidereal Time, 3h 36m 8' 40s.
					Add to	Mean Time, 3m 47' 34s.			
					Sub. from	Appt. Time, 3 47' 35"			

This day commences with strong breeze from the S. S. ship under easy sail on the star board tack. 7.30 A. M. started E. N. E. Employed in over hauling Hocks, good mending sails. This A. M. caught seven, abbaen, plenty of fish in sight all day. S. Green's fort improving. Mast heads up from day light until dark - at sun down came to on the star board tack trading with pumps and light attended so ends this day - All well.

Lat. by Obs., 24 48
Long. by Obs., 174-05 1/2
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 11°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 29.80
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S. S.
" Force, strong
Sea, rough
Weather, good.

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, N19° 21' 19"	{ Appt. Noon, 19 21 17 }	Var. 1 Hour, 33' 73"	Equation of Time, decreasing.		Var. 1 Hour, 0' 06.8s.	Sun's Semi-Diam., 15' 50"	Sidereal Time, 3h 40m 4' 90s.
					Add to	Mean Time, 3m 46' 49s.			
					Sub. from	Appt. Time, 3 46' 49"			

This day commences with fresh breeze from the west ship on the Port tack 7.30 A. M. set fore sail and jib! Employed this A. M. in making out for after work for provisions, left at work on fore stay sail. Employed in making buckets - This P. M. employed in over hauling Hocks mending Hocks - Killed two pigs - Caught one fish, plenty of fish in sight also three fish taken seen today. Mast heads up from day light until dark - Pumps and light carefully attended - S. Green's fort very much improved so ends this day - All well.

Lat. by Obs., 24 13
Long. by Obs., 173-43
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 10 1/2°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 29.90
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S. S.
" Force, Fresh
Sea, Rough
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, N19° 34' 39"	Var. 1 Hour, 32' 00"	Equation of Time, decreasing, Add to Mean Time, 3m 44' 58s. Sub. from Appt. Time, 3 44' 59	Var. 1 Hour, 0' 090s.	Sun's Semi-Diam., 15' 50"	Sidereal Time, 3h 44m 1' 52s.
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This day commenced with a strong breeze from the S. E. - freshened up to a moderate gale - At day light made sail stood on the port tack tacking and heading S. E.
 2 P. M. light heavy rain squall - put ship under storm staysails and boom topsails
 At 5 P. M. took in the fore topsail - heavy ship -
 H. Green's fort which improved -
 all well.

Lat. by Obs.,
 Long. by Obs.,
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, 10 1/2
 Dev. used,
 Steaming Time, h. m.,
 Average Speed, knots roths.,
 Barom., 29.90
 Thermom., Air,
 „ Sea,
 Current,
 Drift,
 Wind, S. E.
 „ Force,
 Sea, squally
 Weather, rough
 squally.

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, N19° 47' 38"	Var. 1 Hour, 32' 07"	Equation of Time, decreasing, Add to Mean Time, 3m 42' 14s. Sub. from Appt. Time, 3 42' 15	Var. 1 Hour, 0' 113s.	Sun's Semi-Diam., 15' 50"	Sidereal Time, 3h 47m 58' 07s.
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This day commenced with strong breeze from the S. E. At day light set down topsails and jib - stood on the port tack all day employed in repairing an old foresail - Capt. at work on a new fore staysail - Breeze in sight from all day - S. E. of us was made up from day light until dark -
 No life seen on the water -
 H. Green still improving
 all well.

Lat. by Obs., 24-18
 Long. by Obs.,
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, 10.5
 Dev. used,
 Steaming Time, h. m.,
 Average Speed, knots roths.,
 Barom., 29.90
 Thermom., Air,
 „ Sea,
 Current,
 Drift,
 Wind, S. E.
 „ Force, strong
 Sea, rough
 Weather, squally.

NAUT. EPHEMERIS,	Sun's Declination, <i>increasing,</i>	{ Mean Noon, N30° 0' 17" } { Appt. Noon, 20 0 16 }	Var. 1 Hour, 31 22"	Equation of Time, <i>decreasing,</i> Add to Mean Time, 3m 39.17s. Sub. from Appt. Time, 3 39.13s.	Var. 1 Hour, 0.135s.	Sun's Semi-Diam., 15' 50"	Sidereal Time, 3h 51m 54.63s.
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This day commenced with a
fresh breeze from the S. S. Ship
on the port tack under easy
sail. Men employed in repair-
ing sail. finished repairing
fore sail, furled the one on the
yard, and sent the repaired
one, repaired the one on mizzen
and stowed it away in cask
Rest of day spent in repair-
ing an old ditto
Men employed in repairing
new fore topsail.
Capt employed in making
new main topsail.
Must head up for day
light quite dark.
Dr. up in eight.
H. Green's for mizzen
shortened sail for the night
loading it x 2.
Pumps and light mill
attended as usual this day.
All well.

Lat. by Obs., 24-00
Long. by Obs., 173-50
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 10.5
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S. S. E.
" Force, Strong
Sea, rough
Weather, good

NAUT. EPHEMERIS.	Sun's Declination, <i>increasing,</i>	{ Mean Noon, N20° 12' 36" Appt. Noon, 20 12 34 }	Var. 1 Hour, 30° 35'	Equation of Time, <i>decreasing,</i> Add to Mean Time, 3m 35.67s Sub. from Appt. Time, 3 35.68	{ Var. 1 Hour, 0.156s. }	Sun's Semi-Diam., 15' 49"	Sidereal Time, 3h 55m 51.18s.
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This day commences with
a light breeze from the South. Ship
on the Port. The trading St. I. St.
under plain sail - Employed repair-
ing sails - sent out to be repaired
jib and brought in whole for repair.
Caught several a black fish (the
fore) from - Mate finished roping
the staysail and commenced
roping mizzen staysail second
mate put work in the rigging
third mate overhauled the
fore ho - kept at work on deck
main topsail - Carpenter employed
at sawing for about 1/2 day - Carpenter
cutting his tools - Mrs. G. and
at work in breeding "by get me not".
Dinner made up for the day
light until dark - Bunches and
light carefully attended - H. Green
not minding.
Joe Thurston is happy he has
first watch at the "duff" tomorrow
All well.

Lat. by Obs., 23-15
Long. by Obs., 173-53
Course by Obs.,
Distance by Obs.,
" by Log, 10 1/2
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.
Thermom., Air,
" Sea,
Current,
Drift,
Wind, Variable
" Force, light
Sea, smooth
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, N20° 24' 34" } Appt. Noon, 20 24 33 }	{ Var. 1 Hour, 29' 43" }	Equation of Time, decreasing,		{ Var. 1 Hour, 0' 178s. }	Sun's Semi-Diam., 15' 49"	Sidereal Time, 3h 50m 47.74s.
				Add to	Mean Time, 3m 31' 66s.			
				Sub. from	Appt. Time, 3 31' 67"			

This day commences with a light breeze from the north and fine weather - At day light made sail on the star board tack. Em played in repairing sails finished repairing jib which was sent yesterday. stowed it away in case.

Repairing upper fore topsail the remainder of the day. Mate finished repairing Mizzen stay sail, also roped major royal topsail.

Third mate overhauling brace blocks -

Second mate overhauling blocks and repairing sails. Em and Carpenter employed at odd jobs about deck.

My own shortlanded sail loading S. E.

Mast heads up from day light until dark - So ends this day - H. Green still improving

Lat. by Obs., 23-00

Long. by Obs., 173-33 1/2

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 10 1/2

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.,

Barom., 30.04

Thermom., Air,

,, Sea,

Current,

Drift,

Wind,

,, Force,

Sea,

Weather,

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, N20° 36' 11" } Appt. Noon, 20 36 10 }	{ Var. 1 Hour, 28' 60" }	Equation of Time, decreasing,		{ Var. 1 Hour, 0' 199s. }	Sun's Semi-Diam., 15' 49"	Sidereal Time, 4h 3m 44' 30s.
				Add to	Mean Time, 3m 27' 14s.			
				Sub. from	Appt. Time, 3 27' 15"			

This day commences with light airs and calm at day light made sail on the star board tack, heading between E and S. E.

Em played in repairing sails. Repaired the fore upper ft. sail, in left the one up there and bent the repaired one in its place.

Repaired the one sub boom and then sent it up to the main, remainder of the day - worked on the main upper topsail - Mate finished major royal - Capt employed on main topsail - Carpenter at work making blocks - Carpenter, Cooper and Engineer at work block smithing - Caught a few fish.

Later part of day shed calm H. Green's still improving - seeing it a high day.

Mast heads up from day light until dark - So ends this day - all well.

Lat. by Obs., 22-54

Long. by Obs., 173-08 1/2

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used,

Dev. used, 10 1/2

Steaming Time, h. m.,

Average Speed, knots 10ths.,

Barom., 30.1

Thermom., Air,

,, Sea,

Current,

Drift,

Wind,

,, Force,

Sea,

Weather,

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, N20° 47' 27"	Var. 1 Hour, {	Equation of Time, decreasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	increasing,	{ Appt. Noon, 20 47 23 }	27.71"	Add to Mean Time, 3m 22.11s.	0.220s.	15' 49"	4h 7m 40.55s.
				Sub. from Appt. Time, 3 22.13			

This day commences with a fresh breeze from the North, ship under topsails and courses, steering S. by E. - Wind gradually hauled to the S.W. - Employed in repairing sails - finished repairing upper and lower main topsails - Left at work on fore main topsail.

This P.M. washed deck and chandys for Sunday.

At 8 am down shortened sail for the night - Strong breeze and squally.

Must head up from day light until dark.

Pumps and lights carefully attended to so ends this day of all well.

H. Green still off duty.

Lat. by Obs., 23-28

Long. by Obs., —

Course by Obs.,

Distance by Obs.,

„ by Log,

Var. used, 10 1/2

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.,

Barom., 29.95

Thermom., Air,

„ Sea,

Current,

Drift,

Wind,

„ Force, variable

Sea, fresh

Weather, hazy

„ good.

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, N20° 58' 21"	Var. 1 Hour, {	Equation of Time, decreasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	increasing,	{ Appt. Noon, 20 58 20 }	28.81"	Add to Mean Time, 3m 16.59s.	0.240s.	15' 49"	4h 11m 37.41s.
				Sub. from Appt. Time, 3 16.61			

This day commences with a light breeze from the S. E.

At daylight made sail on the star board tack - ship under up plain sail - ship steering by the wind.

Must head up from day light until dark.

Caught a few fish -

Pumps and lights carefully attended to so ends this day of all well.

H. Green's foot still improving still off duty.

Lat. by Obs., 23-58

Long. by Obs., 173-1

Course by Obs.,

Distance by Obs.,

„ by Log,

Var. used, 10 1/2

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.,

Barom., 30.1

Thermom., Air,

„ Sea,

Current,

Drift,

Wind,

„ Force, light

Sea, smooth

Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, N21° 8' 54" {	Var. 1 Hour, 25' 91" {	Equation of Time, decreasing, {	Var. 1 Hour, 0' 260s. {	Sun's Semi-Diam., 15' 49" {	Sidereal Time, 4h 15m 33' 97s. {
	increasing,	Appt. Noon, 21 8 52 {		Add to Mean Time, 3m 10' 53s. {			
				Sub. from Appt. Time, 3 10' 60 {			

This day commences with a fresh breeze from the south. Ship on the starboard tack by the wind. At day light made sail. Employed in repairing sails, sent down lower main topsail and sent up main in its place - repaired the topsail and put it below, repaired the main, dismasted sail, and sent up in its place - repaired the main, dismasted sail and put it below. Left at mid, on new main topsail.

Next made up from day light until dark - Pumps and mill attended to.

So ends this day - H. Green still off duty, foot improving.

Lat. by Obs., 24-47
Long. by Obs., 172-28
Course by Obs.,

Distance by Obs.,
" by Log,
Var. used, 10 1/2
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.15

Thermom., Air,
" Sea,

Current,

Drift,

Wind, S.W. by S.

" Force, light

Sea, smooth

Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, N21° 19' 5" {	Var. 1 Hour, 24' 99" {	Equation of Time, decreasing, {	Var. 1 Hour, 0' 280s. {	Sun's Semi-Diam., 15' 48" {	Sidereal Time, 4h 19m 30' 52s. {
	increasing,	Appt. Noon, 21 19 3 {		Add to Mean Time, 3m 4' 00s. {			
				Sub. from Appt. Time, 3 4' 11 {			

This day commences with light air and calm from S.W. At day light made sail, on the starboard tack.

Employed in on hauling blocks and repairing sails - sent fore staysail down and repaired it & re-set it again - Note employed in repping sparker.

Steward caught an 80 lb. at noon.

At one down shortened gage sail for the night, heading S.W. by S.

H. Green's foot improving is able to walk on it.

Next made up from day light until dark. So ends this day all well.

Lat. by Obs., 24-48
Long. by Obs.,
Course by Obs.,

Distance by Obs.,
" by Log,
Var. used, 10 1/2
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.1

Thermom., Air,
" Sea,

Current,

Drift,

Wind, S.W. by S.

" Force, light

Sea, heavy swell

Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, N21° 28' 53"	Var. 1 Hour, {	Equation of Time, decreasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	increasing, {	Appt. Noon, 21 28 52	24'06"	Add to Mean Time, 2m 57'12s	0'300s	15' 48"	4h 23m 27'08s
				Sub. from Appt. Time, 2 57'13			

This day commenced with a fresh breeze from the S. St. ship under easy sail, trading S. St. First part of day employed in mending sails - Gudge and late part of day squally. Employed in repairing Major to pmast stay sail and spar. Mast heads up from day light until dark - Pumps and light-cars fully attended - So ends this day - All well.

Lat. by Obs., —
Long. by Obs., —
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 10 1/2°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 29.90
Thermom., Air,
" Sea,

Current,

Drift,

Wind,

" Force, S. St.

Sea, Fresh.

Weather, ruggel
foggy

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, N21° 38' 20"	Var. 1 Hour, {	Equation of Time, decreasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	increasing, {	Appt. Noon, 21 38 19	23'13"	Add to Mean Time, 2m 49'68s	0'320s	15' 48"	4h 27m 23'44s
				Sub. from Appt. Time, 2 49'69			

This day commenced with fine weather and fresh breeze from the South. At 6.45 am ship headed S. St. - Ship under plain sail; many well from the S. St. This A. M. employed in odd job about decks - but the Major to pmast stay sail. This A. M. employed in fixing sparker - at 3 P. M. sent the sparker. Left at noon on main top sail. Mast heads up from day light until dark. Working in sight - Pumps and light-cars fully attended - So ends this day. All well. H. Green's fort still in - spring.

Lat. by Obs., 25-36
Long. by Obs., 172-48
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 10 1/2°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 30.1

Thermom., Air,

" Sea,

Current,

Drift,

Wind, S.

" Force, Fresh.

Sea, Ruggel

Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, N21° 47' 24"	Var. 1 Hour, {	Equation of Time, decreasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	increasing,	Appt. Noon, 21 47 23	22° 20'	Add to Mean Time, 2m 41.77s.	0° 33.9s.	15' 48"	4h 31m 20.19s.
				Sub. from Appt. Time, 2 41.79			

This day commences with a light breeze from the South; ship on the port tack by the wind - heading N X E.
Employed in repairing main stay sail, caught some attack this A. M.
Capt. at work on main top sail Carpenter at work at odd jobs about deck.
Must heads up from daylight until dark -
Pumps and light carefully attended
So ends this day -
All well.

Lat. by Obs., 25-42
Long. by Obs., 174-30
Course by Obs.,
Distance by Obs.,
,, by Log,
Var. used, 10 1/2°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.20
Thermom., Air,
,, Sea,
Current,
Drift,
Wind, South
,, Force, Light
Sea, ruffled
Weather, good.

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, N21° 56' 5"	Var. 1 Hour, {	Equation of Time, decreasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	increasing,	Appt. Noon, 21 56 4	21° 25'	Add to Mean Time, 2m 33.42s.	0° 35.7s.	15' 48"	4h 35m 16.75s.
				Sub. from Appt. Time, 2 33.44			

This day commences with a strong breeze from the S. S. E. ship on the port tack, under easy sail
Employed in repairing main stay sail - several other jobs about deck -
Capt. at work on main top sail
Men employed at odd jobs about deck -
One fire back in sight this A. M.
This P. M. killed one pig - caught one fish -
Tossed off deck -
Must heads up from daylight until dark -
Pumps and light carefully attended
So ends this day.
All well.

Lat. by Obs., 25-34
Long. by Obs., 174-44
Course by Obs.,
Distance by Obs.,
,, by Log,
Var. used,
Dev. used, 10 1/2°

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.30
Thermom., Air,
,, Sea,
Current,
Drift,
Wind, Strong East
,, Force, Strong
Sea, ruffled
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, N22° 4' 24"	Var. 1 Hour, {	Equation of Time, decreasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	increasing, {	Appt. Noon, 22 4 23	20'30"	Add to Mean Time, 2m 24'48s.	0'375s.	15' 48"	4h 39m 13.31s.
				Sub. from Appt. Time, 2 24'65			

This day commences with a strong breeze from the S. E. - ship on port tack under main topsails and staysails. Must hands up from day light until dark. Nothing seen but no gun fish. So ends this day - All well.

Lat. by Obs., 25-40
Long. by Obs., 175-19
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 10 1/2
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10th.

Barom.,
Thermom., Air, 30.40
" Sea,
Current,
Drift,
Wind, S. E.
" Force, strong
Sea, rough
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, N22° 12' 19"	Var. 1 Hour, {	Equation of Time, decreasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	increasing, {	Appt. Noon, 22 12 18	19'34"	Add to Mean Time, 2m 15'42s.	0'392s.	15' 47"	4h 43m 9'86s.
				Sub. from Appt. Time, 2 15'43			

This day commences with a strong breeze ship on the Port tack under main topsails, staysails and jib. Crew played this A. M. in making out board, and a crew day from the fore top - This P. M. took out herring gill.

Remainder of day crew employed at various jobs about deck. Left at work on main topsails. Must hands up from day light until dark, nothing seen. Pumps and lights well attended. All well.

Lat. by Obs., 25-56
Long. by Obs., 176-01
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 10 1/2
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10th.

Barom.,
Thermom., Air, 30.40
" Sea,
Current,
Drift,
Wind, S. E.
" Force, strong
Sea, rough
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, N22° 19' 51" } Appt. Noon, 22 19 51	{ Var. 1 Hour, 18'37" }	Equation of Time, decreasing,		{ Var. 1 Hour, 0'400s. }	Sun's Semi-Diam., 15' 47"	Sidereal Time, 4h 47m 6'42s.
				Add to Mean Time, 2m 5'31s.	Sub. from Appt. Time, 2 5'32			

This day commences with a strong breeze from the S. E. ship on the port tack, under lower topsails and storm staysails heading N. S. E. - At 12.30 noon ship at 4.15 P. M. furled the fore topsail - At same hour ship on the star board tack heading N. S. E. under short sail Mast made up for day light until dark - Distances seen - Pumps and lights carefully attended - sharp look out all night - So ends this day -

Lat. by Obs., 26-20
Long. by Obs., 176-35
Course by Obs.,
Distance by Obs.,
,, by Log,
Var. used, 10 1/2
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.40
Thermom., Air,
,, Sea,

Current,

Drift,

Wind, S. E.

,, Force, strong

Sea, 3

Weather, rugged
good

NAUT. EPHEMERIS {	Sun's Declination, increasing,	{ Mean Noon, N22° 27' 0" } Appt. Noon, 22 27 0	{ Var. 1 Hour, 17'39" }	Equation of Time, decreasing,		{ Var. 1 Hour, 0'424s. }	Sun's Semi-Diam., 15' 47"	Sidereal Time 4h 51m 2'08s.
				Add to Mean Time, 1m 55'31s.	Sub. from Appt. Time, 1 55'32			

This day commences with a strong breeze from the E. S. E. ship under lower main topsails and storm staysails This A. M. employed in hoisting - This P. M. employed on the new main topsails putting in gunwicks - This P. M. hauled on pig. Mast made up from day light until dark - One shark seen, several birds and some help Pumps and lights carefully attended - So ends this day - all well

Lat. by Obs., 25-54
Long. by Obs., 176-25
Course by Obs.,
Distance by Obs.,
,, by Log,
Var. used, 10 1/2
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.35
Thermom., Air,
,, Sea,

Current,

Drift,

Wind, E. S. E.

,, Force, strong

Sea, 3

Weather, rugged
good

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N22° 33' 46" } Var. 1 Hour, {

Equation of Time, decreasing, { Add to Mean Time, 1m 45.4s. } Var. 1 Hour, {

Sub. from Appt. Time, 1 45.46 } 0.439s.

Sun's Semi-Diam., 15' 47"

Sidereal Time, 4h 54m 59.53s.

This day commences with a strong breeze from the E. S. E. and continues so through out the day. At day light set the fore top sail.

Employed Mr. A. M. in repairing our main topsail, and other odd jobs about deck.

Mustered the crew from day light until dark. Sun down took in fore top sail.

Ship on the starboard tack heading N. E. x N.

Pumps and light carefully attended to. Sharp look out all day - nothing seen. All well.

Lat. by Obs., 25-32

Long. by Obs., 176-20

Course by Obs.,

Distance by Obs.,

„ by Log,

Var. used, 10 1/2 °

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.,

Barom., 30.35

Thermom., Air,

„ Sea,

Current,

Drift,

Wind, E. S. E.

„ Force, strong

Sea, rugged

Weather, good

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N22° 40' 8" } Var. 1 Hour, {

Equation of Time, decreasing, { Add to Mean Time, 1m 34.74s. } Var. 1 Hour, {

Sub. from Appt. Time, 1 34.75 } 0.453s.

Sun's Semi-Diam., 15' 47"

Sidereal Time, 4h 58m 56.09s.

This day commences with a strong breeze from the East - Ship under lower main top sail, and staysails, at day light.

At 6.30 A. M. Mr. B. raised sperm whales on the weather quarter of the ship - and set fore top sail. Whales came up all around the ship. They thrashed equally and thrasher in and out but took no account of bad weather. Heavy rain squalls after rain squall set the jib loose. Main top sail did not set at on account of heaving up stronger whales went out of sight going about N. E.

Ship on the starboard tack all day - heading N. N. E. - under lower top sail and storm staysails, too rugged to do much of any thing.

Set out a baw - (baw) P. M. Home ship - set sun down - heading S. x E. - ends this day. All well.

Lat. by Obs., 24-57

Long. by Obs., 176-14

Course by Obs.,

Distance by Obs.,

„ by Log,

Var. used, 10 1/2 °

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.,

Barom., 30.25

Thermom., Air,

„ Sea,

Current,

Drift,

Wind, E.

„ Force, strong

Sea, rugged

Weather, squally

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, N22° 48' 6" } { Appt. Noon, 22 48 6 }	Var. 1 Hour, 14' 43"	Equation of Time, decreasing,		Var. 1 Hour, 0' 46.6s.	Sun's Semi-Diam., 15' 47"	Sidereal Time, 5h 2m 52.65s.
				Add to Mean Time, 1m 23.71s.	Sub. from Appt. Time, 1 23.72			

This day commences with a strong breeze from the East and continues so through out the day.
Ship under lower topsails and storm staysails, on the star board tack all day.
This P. M. killed one pig - caught one fish.
At P. M. one ship for the night.
Pumps and lights care fully attended -
So ends this day -
all well

Lat. by Obs., 25.18

Long. by Obs.,

Course by Obs.,

Distance by Obs.,

by Log,

Var. used, 10 1/2°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.

Barom., 30.20

Thermom., Air,

Sea,

Current,

Drift,

Wind, E.

Force,

Sea, Strong

Weather, ruggled

good

NAUT. EPHEMERIS {	Sun's Declination, increasing,	{ Mean Noon, N22° 51' 40" } { Appt. Noon, 22 51 40 }	Var. 1 Hour, 13' 43"	Equation of Time, decreasing,		Var. 1 Hour, 0' 47.8s.	Sun's Semi-Diam., 15' 47"	Sidereal Time 5h 6m 49.20s.
				Add to Mean Time, 1m 12.38s.	Sub. from Appt. Time, 1 12.39			

This day commences with a strong breeze - Ship on the Port tack.
At daylight made sail, heading E. by N.
At 9 A. M. one ship, headed N. N. E.
West heads up four day light until dark - one piece of squid seen - and a small shrimp sack.
At sun down shortened sail for the night.
At 7 P. M. one ship for the night.
So ends this day -
all well.
H. Green returns to duty.

Lat. by Obs., 25.10

Long. by Obs., 176-24

Course by Obs.,

Distance by Obs.,

by Log,

Var. used, 10 1/2°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.

Barom., 30.15

Thermom., Air,

Sea,

Current,

Drift,

Wind, E. S. E

Force,

Sea, Strong

Weather, ruggled

good

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, N22° 50' 50" {	Var. 1 Hour, 12' 42" {	Equation of Time, decreasing, {	Var. 1 Hour, 0' 49s. {	Sun's Semi-Diam., 15' 47" {	Sidereal Time, 5h 10m 45' 70s. {
	increasing,	{ Appt. Noon, 22 56 50 }		Add to Mean Time, 1m 0' 78s. {			
				Sub. from Appt. Time, 1 0' 79 }			

This day commences with a fresh breeze from the East. At day
 some ship heaving E. N. E. - at day
 light set the gun sail -
 Men employed in making
 main gale gulls - Male employed
 in reefing new main topsail,
 finished at 3 P. M.
 This A. M. caught 2 fish -
 This P. M. two hundred facks
 in sight.
 Must heave up from day
 light until dark -
 pumps and light - care-
 fully attended -
 A sharp look out kept
 all night.

Lat. by Obs., 24-45-
 Long. by Obs., 176-15-
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, 10 1/2 °
 Dev. used,
 Steaming Time, h. m.,
 Average Speed, knots 10ths.,
 Barom., 30.20
 Thermom., Air,
 „ Sea,
 Current,
 Drift,
 Wind, E. N. E.
 „ Force, Fresh
 Sea, ruffled
 Weather, good.

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, N23° 1' 36" {	Var. 1 Hour, 11' 41" {	Equation of Time, decreasing, {	Var. 1 Hour, 0' 49s. {	Sun's Semi-Diam., 15' 46" {	Sidereal Time, 5h 14m 42' 32s. {
	increasing,	{ Appt. Noon, 23 1 36 }		Add to Mean Time, 0m 48' 93s. {			
				Sub. from Appt. Time, 0 48' 94 }			

This day commences with
 fresh breeze from the East. At day
 light made all sail, on the star
 board tack
 Men employed in putting out a
 new Dory for waste boat in the
 A. M.
 Caught one fish this A. M.
 Saw Jack seen this A. M.
 At noon some ship
 This P. M. broke out ship took out
 new main topsail, and started
 sailing
 Stood other sails in cask.
 At sun down shortened
 down sail -
 Must heave up from day
 light until dark. A sharp look
 out kept.
 Pumps and light - carefully
 attended. So ends this day
 all well.

Lat. by Obs., 24-49
 Long. by Obs., —
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, 10 1/2 °
 Dev. used,
 Steaming Time, h. m.,
 Average Speed, knots 10ths.,
 Barom., 30.15
 Thermom., Air,
 „ Sea,
 Current,
 Drift,
 Wind, Variable
 „ Force, light
 Sea, smooth
 Weather, good

24th Week.]

WEDNESDAY, 12th JUNE, 1907.

[163-202.]

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, N23° 5' 58"	{ Appt. Noon, 23 5 58 }	Var. 1 Hour, 10'40"	Equation of Time, decreasing,		Var. 1 Hour, 0'508s.	Sun's Semi-Diam., 15' 46"	Sidereal Time, 5h 18m 38'88s.
					Add to Mean Time, 0m 36'35s.	Sub. from Appt. Time, 0 36'36			

This day commences with a light breeze from the N. E. At day light, made sail, on the port tack. Employed in making out Pork and flour from the main hatch. Hault the work on the main topsail. Caught new fish - Fin back and ~~hump~~ back sheep. Finished making out, and stowing back at 3. P. M. Hault the decks. Shipped sail for the night. Mast hauled up from daylight until dark. So ends this day - All well.

Lat. by Obs., 25-48

Long. by Obs., 176-04

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 10 1/2°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots roths.,

Barom.,

Thermom., Air, 30.30

,, Sea,

Current,

Drift,

Wind, N. E.

,, Force, light

Sea, smooth

Weather, good

24th Week.]

THURSDAY, 13th JUNE, 1907.

[164-201.]

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, N23° 9' 55"	{ Appt. Noon, 23 9 55 }	Var. 1 Hour, 9'38"	Equation of Time, decreasing,		Var. 1 Hour, 0'515s.	Sun's Semi-Diam., 15' 46"	Sidereal Time, 5h 22m 35'43s.
					Add to Mean Time, 0m 24'57s.	Sub. from Appt. Time, 0 24'58			

This day had strong breeze from the N. E. and on passed Irish rain squalls. At day light set on sail ship on the port tack all day. Caught new fish. Employed in making main topsail. Mast hauled up from day light until dark. Pumps and light well attended. So ends this day - All well.

Lat. by Obs.,

Long. by Obs.,

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used,

Dev. used, 10 1/2°

Steaming Time, h. m.,

Average Speed, knots roths.,

Barom., 30.10

Thermom., Air,

,, Sea,

Current,

Drift,

Wind, N. E.

,, Force, strong

Sea, smooth

Weather, squally

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N23° 13' 28" } Var. 1 Hour, { Equation of Time, decreasing, } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, }
 increasing, { Appt. Noon, 23 13 28 } 8-35" { Add to Mean Time, 0m 12-12s. } 0-522s. { 15' 46" { 5h 26m 31-99s.

This day had light breeze from the N.W. Dr. ship at day light made sail on port tack 6.40 A.M. saw spout in water quarter on gulf, spout proved to be fin back. At 10 A.M. steered S. by E. Carpenter employed in making new davit. Carpenter employed in setting up head gear. Mast made up from day light until dark. At sun down shortened sail on the port tack, heading E. N. E. Caught two fish. Carpenter employed in making main topsail. Mast made up from day light until dark. Pumps and light-cars fully attended to. Sailed this day - all well.

Lat. by Obs., 26-44
 Long. by Obs.,
 Course by Obs.,
 Distance by Obs.,
 " by Log,
 Var. used, 10 1/2
 Dev. used,
 Steaming Time, h. m.,
 Average Speed, knots faths.,
 Barom., 30.10
 Thermom., Air,
 " Sea,
 Current,
 Drift,
 Wind, S. by E.
 " Force, light
 Sea, smooth
 Weather, smooth
 good

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N23° 16' 36" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, }
 increasing, { Appt. Noon, 23 16 36 } 7-33" { Sub. from Mean Time, 0m 0-48s. } 0-523s. { 15' 46" { 5h 30m 28-55s.

This day light breeze from the N.W. Dr. ship at day light made sail on the port tack heading E. N. E. - Carpenter employed in setting up new main back stay - and new lanyards. Carpenter at work making a new davit. Carpenter employed in making a stanch by the back. Caught one apter. Several bill fish seen. Saw fin back in sight. Shortened down sail on the port tack heading E. N. E. Mast made up from day light until dark. In sharp hook but kept. Pumps and light-cars fully attended to. Sailed this day - all well.

Lat. by Obs., 27-00
 Long. by Obs., 175-13
 Course by Obs.,
 Distance by Obs.,
 " by Log,
 Var. used, 10 1/2
 Dev. used,
 Steaming Time, h. m.,
 Average Speed, knots faths.,
 Barom., 39.07
 Thermom., Air,
 " Sea,
 Current,
 Drift,
 Wind, N.
 " Force, light
 Sea, smooth
 Weather, smooth
 good

NAUT. EPHEMERIS, {	Sun's Declination, { increasing,	{ Mean Noon, N23° 19' 20" } { Appt. Noon, 23 19 20 }	{ Var. 1 Hour, } { 6'30" }	Equation of Time, <i>increasing</i> ,		{ Var. 1 Hour, } { 0'53.2s. }	Sun's Semi-Diam., 15' 46"	Sidereal Time, 5h 34m 25.10s.
				Sub. from Mean Time, 0m 13'21s. Add to Appt. Time, 0 13'21				

This day had fresh breeze from the N. W. - ship on the Port tack by the wind, under topsails and courses. At day light gave two fire tacks N. 15° W. raised white water on the weather quarter fore ship and see nothing more of it.

At 10.15 a.m. shortened down on the Port tack. So ends this day - all well.

Pumps and lights carefully attended to.

Lat. by Obs., 27-06
Long. by Obs., 174-07
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 10 1/2
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 30.

Thermom., Air,

" Sea,

Current,

Drift,

Wind,

" Force,

Sea,

Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, <i>increasing,</i>	{ Mean Noon, N23° 21' 39" } { Appt. Noon, 23 21 39 }	{ Var. 1 Hour, 5'27" }	Equation of Time, <i>increasing,</i>		{ Var. 1 Hour, 0'53.6s. }	Sun's Semi-Diam., 15' 46"	Sidereal Time, 5h 38m 21.06s.
				Sub. from Mean Time, 0m 26.04s. Add to Appt. Time, 0 26.04				

First and middle part of this day rain and squally. Ship on the Port tack under topsails and fore sails - heading N. 20° E. Wind first part of day from the N. E. middle part of day wind west - later part of day wind from the south. At 10. a.m. started N x E. 12.30 - steered N. E. E. for point at work making a dash.

Men employed about deck at various jobs.

Captain making new main topsail -

Must make up from day light until dark. So ends this day all well.

Lat. by Obs., —

Long. by Obs., —

Course by Obs.,

Distance by Obs.,

" by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots roths.,

Barom., 29.90

Thermom., Air,

" Sea,

Current,

Drift,

Wind,

" Force,

Sea,

Weather, squally

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, N23° 23' 33" }	Var. 1 Hour, {	Equation of Time, increasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	increasing, {	Appt. Noon, 23 23 33 }	4'24" }	Sub. from Mean Time, 0m 38' 94s. }	0'539s. }	15' 46" }	5h 42m 18' 22s. }
				Add to Appt. Time, 0 38 95 }			

This day commenced with a strong breeze from the E. S. E. At day light ship went star board tack heading N. E. At 7.45 Ray moved yards raised a large white water on the lee bow, proved to be a school sperm whales. 9.30 lowered four boats. 1st man of whale and called boats on board hauled up the bow boat, raised shape again sent the boat after them. 2nd boat struck Lap board boat struck mid gear. 3rd whale covered the bow boat by shape a whale and got stop, fork the whale - and got the boat all hoisted at 3.0 P. M.

Had supper and dinner in mess, got all ready for cutting in whale. Set boats crew ready. Ship under loose main topsail fore and mizzen staysail - so ends this day - all well.

Lat. by Obs., 26-33
 Long. by Obs., 173-13
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, 10 1/2
 Dev. used,
 Steaming Time, h. m.,
 Average Speed, knots 10ths.,
 Barom., 29.95
 Thermom., Air,
 „ Sea,
 Current,
 Drift, E. S. E
 Wind, strong
 „ Force,
 Sea, ruffled
 Weather, good.
 2 whales.

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, N23° 25' 2" }	Var. 1 Hour, {	Equation of Time, increasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	increasing, {	Appt. Noon, 23 25 2 }	3'20" }	Sub. from Mean Time, 0m 51' 80s. }	0'540s. }	15' 46" }	5h 46m 14' 78s. }
				Add to Appt. Time, 0 51 90 }			

This day commenced with a strong breeze from the N. E. At 5. A. M. called all hands commenced cutting - At 7.30 Ray moved yards raised school of sperm whales - stopped cutting - lowered four boats. Did not see what was raising from the boats, whales going just to the N. N. W. - called boats on board ship - ran up the chase finished the boat and all hands had breakfast at 10. A. M. - After breakfast finished cutting in whales failed case and put them over board - Ship steering different courses remainder of this day set watches and started the try - masts - Broke out water 4th - P. M. Ship under short sail heading N. N. W. - so ends this day - Pumps and light carefully attended - all well.

Lat. by Obs., 26-25
 Long. by Obs., 173-30
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, 10 1/2
 Dev. used,
 Steaming Time, h. m.,
 Average Speed, knots 10ths.,
 Barom., 29.95
 Thermom., Air,
 „ Sea,
 Current,
 Drift,
 Wind, N. E.
 „ Force, strong
 Sea, ruffled
 Weather, good.

25th Week.]

THURSDAY, 20th JUNE, 1907.

[171-194.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N23° 26' 6" } Var. 1 Hour, { Equation of Time, increasing, { Sun's Semi-Diam., { Sidereal Time, }
 increasing, { Appt. Noon, 23 26 6 } 2:17" { Sub. from Mean Time, 1m 4:88s. } 0:54ls. { 15' 46' { 5h 50m 11:33s.

This had strong breeze from the N. Ship on the starboard tack heading N x N. At day light made some effort, stood to the N. 7.15 A.M. had rain squall - Wind hauled to the West. 12. Down from ship heading N x N. Sun down shortened sail for night.

6.30 was out - Remained of day been employed at various jobs. Third mate at work getting his boat ready.

Left at work on main topsail. Ends this day. Pumps and light - can fully attended. All well.

Lat. by Obs., 26-40
 Long. by Obs., 173-15
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, 10 1/2
 Dev. used,

Steaming Time, h. m.,
 Average Speed, knots roths.,

Barom., 29.90
 Thermom., Air,
 „ Sea,
 Current,
 Drift,
 Wind, variable
 „ Force, strong
 Sea, rugged
 Weather, good

25th Week.]

FRIDAY, 21st JUNE, 1907.

[172-193.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N23° 26' 46" } Var. 1 Hour, { Equation of Time, increasing, { Sun's Semi-Diam., { Sidereal Time, }
 increasing, { Appt. Noon, 23 26 46 } 1:13" { Sub. from Mean Time, 1m 17:84s. } 0:540s. { 15' 46" { 5h 54m 7:89s.

First part of this day had strong breeze from the west. Ship under lower main topsail and storm staysails - At 2.30 P.M. hoisted up top and starboard boats took out the craft and fished them in the doris buds. - took in main topsail and foretop mast staysail, ship under three lower staysails. 6.30 ship gave heavy roll and capsized the heli tub on top of house - Steward got hit with tub - hurt his hand and sprained his ankle - ship taking considerable water.

10.30 took out the heavy roll capsized a trunk in cabin, standing it on ends.

So ends this day - All well.

Lat. by Obs.,
 Long. by Obs.,
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, 10 1/2
 Dev. used,

Steaming Time, h. m.,
 Average Speed, knots roths.,

Barom., 29.65
 Thermom., Air,
 „ Sea,
 Current,
 Drift,
 Wind, N x N.
 „ Force, strong
 Sea, rugged
 Weather, bad

NAUT. EPHEMERIS.	Sun's Declination, increasing,	{ Mean Noon, N23° 27' 1" } { Appt. Noon, 23 27 1 }	Var. 1 Hour, 0° 10'	Equation of Time, increasing.		Var. 1 Hour, 0° 53' 30".	Sun's Semi-Diam., 15' 46"	Sidereal Time, 5h 58m 44.5s.
				Sub. from Mean Time, 1m 30.80s.	Add to Appt. Time, 1 30.82			

This comes in with a strong breeze from the S. S. It. Shipyard down stay sails reaching S. It. 9.30 A. M. gross mized the main topsail 5. P. M. set main topsail pumps and light care fully attended, so ends this day all well. Stewards foot quite hard

Lat. by Obs., 25-18
Long. by Obs., 172-19
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 1 1/2
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.

Barom., 29.70
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S. S. It.
" Force, strong
Sea, mized
Weather, fair

NAUT. EPHEMERIS.	Sun's Declination, decreasing,	{ Mean Noon, N23° 26' 51" } { Appt. Noon, 23 26 51 }	Var. 1 Hour, 0° 93'	Equation of Time, increasing.		Var. 1 Hour, 0° 53' 7s.	Sun's Semi-Diam., 15' 46"	Sidereal Time, 6h 2m 10.1s.
				Sub. from Mean Time, 1m 43.71s.	Add to Appt. Time, 1 43.73			

This day had fresh breeze from the S. S. It. slip on the Port tack heading S. W. and S. It. At daylight set topsails and at 7.30 - set fore sail, and main topsail 10. A. M. set fore topsail, and Mizzen topmast staysail This P. M. light rain squalls Mast hauled up from day light until dark. Pump and light care fully attended. Stewards still laid up.

Lat. by Obs., 24-54
Long. by Obs., 173-08
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 1 1/2
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.

Barom., 30.00
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S. S. It.
" Force, strong
Sea, mized
Weather, fair

26th Week.]

MONDAY, 24th JUNE, 1907. (St. John Baptist. Midsummer Day.)

[175-190.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N23° 26' 16" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, }
 decreasing, { Appt. Noon, 23 26 16 } 1' 97" Sub. from Mean Time, 1m 56' 56s. Add to Appt. Time, 1 56' 58 0' 534s. 15' 46' 6h 5m 57' 56s.

This day commences with a light breeze from the S. E. ship in the Port tack, heading S. X. St. In A. M. broke out hard head, remainder of day employed in stowing oil, stowed down 957 gallons of oil.

At sun drove out ship under short sail in the Port tack.

Stewart still off duty, his foot improving.

Must head up from day light until dark, pumps and light carefully attended to.

So ends this day all well. Caught 5. a. t. a. c. - this morning.

Lat. by Obs., 24-57
 Long. by Obs., 173-37
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, 10 1/2
 Dev. used,

Steaming Time, h. m.,
 Average Speed, knots roths,

Barom., 30.10

Thermom., Air,

„ Sea,

Current,

Drift,

Wind, S. E.

„ Force, light

Sea, very small

Weather, light

26th Week.]

TUESDAY, 25th JUNE, 1907.

[176-189.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N23° 25' 17" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, }
 decreasing, { Appt. Noon, 23 25 16 } 3' 00" Sub. from Mean Time, 2m 9' 33s. Add to Appt. Time, 2 9' 35 0' 530s. 15' 46" 6h 9m 54' 12s.

This day commences with a fresh breeze from the East. At day light hoisted sail in the Port tack, heading E. X. S.

This A. M. employed in breaking out provisions, finished at 10.45 A. M. washed deck.

P. M. took in two traps for repairs - Cooper making boat life belt.

First and middle part of day steered on ship. Late part of day heading S. E.

Spun down shortland sail. Caught two fish.

Must head up from day light until dark. Pumps and light carefully attended to. So ends this day.

Stewart off duty, but his foot improving all well.

Lat. by Obs., 25-50
 Long. by Obs., 174-05
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, 10 1/2
 Dev. used,

Steaming Time, h. m.,
 Average Speed, knots roths,

Barom., 30.15

Thermom., Air,

„ Sea,

Current,

Drift,

Wind, East

„ Force, fresh

Sea, rugged

Weather, cloudy

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N23° 23' 52" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, }
 decreasing, { Appt. Noon, 23 23 52 } 4'03" Sub. from Mean Time, 2m 22'00s. Add to Appt. Time, 2 22'02 } 0'525s. 15' 46" 6h 13m 50'68s.

This day commences with a fresh breeze from the North - At day light made sail and stood on the Port tack heading E x N. At 7. A.M. stood S. of E. Carpenter employed in repairing boat.

Fore crew foremast hines made two fire boat harns and repaired it, and put it out again.

M. Captain at work on new main topsail.

1.30. P.M. heeled to the wind heading E x N.

At sun down shortened sail.

Caught five fish

Most heads up from day light until dark.

Stowards got in proving -

Pumps running light breeze fully attended - Landed Thursday half mil.

Lat. by Obs., 26-40

Long. by Obs., 173-30

Course by Obs.,

Distance by Obs.,

" by Log,

Var. used, 10 1/2'

Dev. used,

Steaming Time, h. m.,

Average Speed, knots roths.,

Barom., 30.05

Thermom., Air,

" Sea,

Current,

Drift,

Wind,

" Force,

Sea,

Weather,

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N23° 22' 3" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, }
 decreasing, { Appt. Noon, 23 22 3 } 5'06" Sub. from Mean Time, 2m 34'56s. Add to Appt. Time, 2 34'58 } 0'520s. 15' 45" 6h 17m 47'24s.

This day commences with a fresh breeze from the N. N. E. At part of day dark and cloudy. Ship on the star board tack. The wind Carpenter employed in repairing boat.

Capt. at work on main top sail.

Men employed at various jobs about deck.

Midill part of day raining.

At 4.30 mil hauled to the West.

Sun down furled foresail.

and were ship.

Later part of day clear.

So ends this day. All mil

Steward still off duty

but improving -

Pumps and light carefully attended.

Lat. by Obs., —

Long. by Obs., —

Course by Obs.,

Distance by Obs.,

" by Log,

Var. used, 10 1/2'

Dev. used,

Steaming Time, h. m.,

Average Speed, knots roths.,

Barom., 30.10

Thermom., Air,

" Sea,

Current,

Drift,

Wind,

" Force,

Sea,

Weather,

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N23° 19' 50" } { Appt. Noon, 23 19 49 }	Var. 1 Hour, 6'08"	Equation of Time, increasing, Sub. from Mean Time, 2m 46'98s. Add to Appt. Time, 2 47'00	Var. 1 Hour, 0'514s.	Sun's Semi-Diam., 15' 45"	Sidereal Time, 6h 21m 43'79s.
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This day commences with a light breeze from the S. S. E. At day light made sail - stood on the port tack by the wind. Employed putting up a new davit for port bow boat. Hanged at 11 AM on boat. Second mate employed in overhauling the keels. Capt. at work on new main topsail. Sun down shortened sail. Mast made up for day light until dark. Humped and lights carefully attended to until this day. Steward still off duty but in evening all well.

Lat. by Obs., 27-02
Long. by Obs., 173-31
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 10 1/2
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.20
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S. S. E.
" Force, light
Sea, smooth
Weather, good.

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N23° 17' 11" } { Appt. Noon, 23 17 11 }	Var. 1 Hour, 7'10"	Equation of Time, increasing, Sub. from Mean Time, 2m 53'25s. Add to Appt. Time, 2 53'27	Var. 1 Hour, 0'508s.	Sun's Semi-Diam., 15' 45"	Sidereal Time, 6h 25m 40'35s.
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This day commences with a light breeze from the S. S. E. At day light made sail, - Ripped two hump backs going to the S. E. Employed in putting out the port bow boat. Making boat sails, and other odd jobs about deck. Capt. finished main topsail. D. M. mended deck. Sun down shortened down sail, stood on the Port tack. One hump back seen this afternoon. So ends this day - Steward still improving all well.

Lat. by Obs., 26-44
Long. by Obs., 173-50
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 10 1/2
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.30
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S. S. E.
" Force, light
Sea, smooth
Weather, good

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N23° 14' 9" } Var. 1 Hour, { Equation of Time, increasing, { Sun's Semi-Diam., { Sidereal Time, }
decreasing, { Appt. Noon, 23 14 8 } 8'13" Sub. from Mean Time, 3m 11'34s. } Var. 1 Hour, 0'500s. 15' 45" 6h 29m 36'91s.

This day commenced with a fresh breeze from the E. & E. As day flight made sail stayed N. N. W. A more stored N. N. W. At 4. P. M. sprang hump back at 5. P. M. shortened sail here to further night. So ends this day.

Don't know where we are

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 10 1/2
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 30.30
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S E
" Force, Fresh
Sea, smooth
Weather, good

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N23° 10' 42" } Var. 1 Hour, { Equation of Time, increasing, { Sun's Semi-Diam., { Sidereal Time, }
decreasing, { Appt. Noon, 23 10 41 } 9'14" Sub. from Mean Time, 3m 23'25s. } Var. 1 Hour, 0'492s. 15' 45" 6h 33m 33'47s.

This day had strong breeze from the N. E. Ship in the Port tack, under easy sail. Men employed at various jobs about deck. Made employed in making boat sail. Capt. at work making main gullant sail. Late part of day strong breeze - ship under main & sail and stayed stay sails. At 4. P. M. hauled star board boat to starboard made took all the tackle out of them. Late part of day - overcast with rain. So ends this day. Pumps and light - can fully attended - all well.

Lat. by Obs., 26-06
Long. by Obs., 174-18
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 10 1/2
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 30.05
Thermom., Air,
" Sea,
Current,
Drift,
Wind, N. E.
" Force, Strong
Sea, ruffled
Weather, fair.

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N23° 6' 50" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, { Sun's Semi-Diam., } Sidereal Time, }
decreasing, { Appt. Noon, 23 6 50 } 10'15" Sub. from Mean Time, 3m 34'04s. Add to Appt. Time, 3 34'08 } 0'483s. 15' 45" 6h 37m 30'02s.

This had commenced with a moderate gale of wind which increased to a strong gale - Ship under three storm staysails on the Port tack At 1.30 P.M. the sea struck Port bow but knocked it off the chains stove it in. did not lose any thing. not any great damage done. Ship - Shipping quite a lot of water on deck At 4.20 gale moderated heavy rain thunder and lightning At 5 P.M. set main topsail to end this day all well. Pumps and light carefully attended to.

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 10 1/2
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.,

Barom., 29.90
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S. E.
" Force, 12
Sea, Gale
Weather, Breezy
bad.

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N23° 2' 35" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, { Sun's Semi-Diam., } Sidereal Time, }
decreasing, { Appt. Noon, 23 2 34 } 11'16" Sub. from Mean Time, 3m 46'41s. Add to Appt. Time, 3 46'44 } 0'472s. 15' 45" 6h 41m 26'58s.

This day had fresh breeze and calms - At day light made sail heading E x S. - Ship employed at various jobs about deck fresh- ing out water, masts & rigging main topsail - Dressed masts & rigging over masts & cross- sail Capt at work on main gallant sail. Killed one pig Must haul ship from day light until dark. One fire back seen, 2 ends this day - all well. Pumps and light carefully attended to.

Lat. by Obs., 27-10
Long. by Obs., 173-20
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 10 1/2
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.,

Barom., 30.00
Thermom., Air,
" Sea,
Current,
Drift,
Wind, N. N. E.
" Force, fresh
Sea, Breezy
Weather, squally

NAUT. EPHEMERIS, {	Sun's Declination, <i>decreasing,</i>	{ Mean Noon, N23° 57' 55" } { Appt. Noon, 22 57 54 }	Var. 1 Hour, 13' 16"	Equation of Time, <i>increasing,</i>		Var. 1 Hour, 0' 46 1/2s.	Sun's Semi-Diam., 15' 45"	Sidereal Time, 6h 45m 23.14s.
				Sub. from Mean Time, 3m 57.61s. Add to Appt. Time, 3 57.64				

This day commences with a light air from the N. E. At day light made snug sail made and topsail and cake with topsail employed, doing morning good nature "fish fork", and "plum stuff".
Two thin licks seen. Must heads up from day light until dark. Pump pressed light care fully attended to -
So ends this day -
Commissary of the *Interpuncture* of America - *United States*

Lat. by Obs., 27-08
Long. by Obs., 173-82
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used, 10 1/2

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.20
Thermom., Air,
" Sea,
Current,
Drift,
Wind, Variable
" Force, light
Sea, ruffled
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, <i>decreasing,</i>	{ Mean Noon, N22° 52' 51" } { Appt. Noon, 22 52 50 }	Var. 1 Hour, 13' 16"	Equation of Time, <i>increasing,</i>		Var. 1 Hour, 0' 44.9s.	Sun's Semi-Diam., 15' 45"	Sidereal Time, 6h 49m 19.69s.
				Sub. from Mean Time, 4m 8.54s. Add to Appt. Time, 4 8.57				

This day had clear fine weather. At day light made sail. At 6.30 A.M. took in Port. Took for repairs. At 7. A.M. steered N. E. Employed in repairing boat setting up jib and flying jib gump. Capt employed making main gallant sail. Mate rigging main top sail. Men employed at odd jobs about deck. Must heads up from day light until dark. Pump and light care fully attended to.
At Sun down steered N. E. Light under short sail. So ends this day -
all right.

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used, 10 1/2

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.20
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S. E.
" Force, light
Sea, ruffled
Weather, good

Weather, *clear & good.*

Weather, *good*

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N22° 35' 17"	{ Appt. Noon, 22 35 16 }	Var. 1 Hour, 16.12"	Equation of Time, increasing,		Var. 1 Hour, 0.407s.	Sun's Semi-Diam., 15' 45"	Sidereal Time, 7h 1m 9.37s.
					Sub. from Mean Time, 4m 39.43s. Add to Appt. Time, 4 39.46				

Add to Appt. Time, 4 39.46

This day commences with a light easterly wind. At day light made all sail, steering S. S. W. for shipping in putting up new starboard hatch door. P. M. worked in main hatch - Carpenter at work making new door for starboard hatch. Carpenter at work making a water tank. Captain at work making new main gallant sail. Sun down & shortened down, under easy sail. Several fire flares seen. Ends this day. Pumps and lights carefully attended to. All well.

Lat. by Obs.,

Long. by Obs.,

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 10 1/2

Dev. used,

Steaming Time, h. m.,

Average Speed, knots roths.,

Barom., 30.15

Thermom., Air,

,, Sea,

Current,

Drift,

Wind,

,, Force, Light

Sea, smooth

Weather, good.

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N22° 28' 38"	{ Appt. Noon, 22 28 37 }	Var. 1 Hour, 17.10"	Equation of Time, increasing,		Var. 1 Hour, 0.391s.	Sun's Semi-Diam., 15' 45"	Sidereal Time, 7h 5m 5.92s.
					Sub. from Mean Time, 4m 49.01s. Add to Appt. Time, 4 49.04				

Add to Appt. Time, 4 49.04

This day commences with clear weather with light East and gentle winds. Middle part rainy and dirty. Late part heavy squalls and rain. Wind shifted to the southwest at 6.30 P. M. First and middle part of day ship under all sails steering S. S. W. Late part under short sail. First part of day employed in repairing damaged fore sail. Carpenter at work on new door. Carpenter making water tank. Left at work on main gallant sail. Saw more "purple backs" - caught five fish. Ends this day. All well.

Lat. by Obs., 26.20

Long. by Obs., 177.30

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 10 1/2

Dev. used,

Steaming Time, h. m.,

Average Speed, knots roths.,

Barom., 30.00

Thermom., Air,

,, Sea,

Current,

Drift,

Wind, S. S. W.

,, Force, Strong

Sea, smooth

Weather, rainy & squally.

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N22° 21' 36" Appt. Noon, 22 21 35 }	{ Var. 1 Hour, 18.07"	Equation of Time, <i>increasing</i> , Sub. from Mean Time, 4m 58.21s. Add to Appt. Time, 4 58.24	{ Var. 1 Hour, 0.375s.	Sun's Semi-Diam., 15' 45"	Sidereal Time, 7h 9m 2.48s.

This day cruises with strong S. S. wind, continues to through out the day. Light phosphenic weather squalls. Ship on star board tack under lower topsails, and strong staysails. Crew employed in making repairs. Haul and second mate making gunnits in the gallant sail - Mate reefing gallant sail. Two fire tacks, and one hump tacks, this day. Caught one Dolphin, but lost him. Pumps and light care - fully attended. So ends this day - All well.

Lat. by Obs., 26-50
Long. by Obs., 177-7
Course by Obs.,
Distance by Obs.,
,, by Log,
Var. used, 10 1/2
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.

Barom., 30.05
Thermom., Air,
,, Sea,
Current,
Drift,
Wind, S. S. W.
,, Force, strong
Sea, rough
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N22° 14' 11" Appt. Noon, 22 14 10 }	{ Var. 1 Hour, 19.03"	Equation of Time, <i>increasing</i> , Sub. from Mean Time, 5m 7.00s. Add to Appt. Time, 5 7.03	{ Var. 1 Hour, 0.357s.	Sun's Semi-Diam., 15' 45"	Sidereal Time 7h 12m 59.04s.

This day cruises with light air and calms, and squalls go through out the twenty four hours. Ship heading different courses. Crew employed in putting out new star board boat clark, and other odd jobs about deck. So ends this day. Pumps and light care - fully attended. All well. Fire tacks seen.

Lat. by Obs., 26-33
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
,, by Log,
Var. used, 10 1/2
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.

Barom., 30.20
Thermom., Air,
,, Sea,
Current,
Drift,
Wind, variable
,, Force, light
Sea, smooth
Weather, good

NAUT. EPHEMERIS.	{ Sun's Declination, decreasing,	{ Mean Noon, N22° 6' 23"	{ Var. 1 Hour, 19' 98"	Equation of Time, increasing,		{ Var. 1 Hour, 0' 338s.	Sun's Semi-Diam., 15' 45"	Sidereal Time, 7h 16m 55.59s.
				Sub. from Mean Time, 5m 15.36s.	Add to Appt. Time, 5 15.39			

This day commences with light breeze and calm ship under all plain sail. Employed in painting decks. Made spring main gallant sail. Put a new fore top mast stay early and securing it. Mast hoists up from daylight until dusk. Pumps and lights care fully attended. So ends this day - all well. Fin back seen.

Lat. by Obs., 26-20
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 10 1/2°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.20
Thermom., Air,
" Sea,
Current,
Drift,
Wind, Variable
" Force, light
Sea, smooth
Weather, good

NAUT. EPHEMERIS.	{ Sun's Declination, decreasing,	{ Mean Noon, N21° 58' 12"	{ Var. 1 Hour, 20' 93"	Equation of Time, increasing,		{ Var. 1 Hour, 0' 319s.	Sun's Semi-Diam., 15' 46"	Sidereal Time, 7h 20m 52.15s.
				Sub. from Mean Time, 5m 23.27s.	Add to Appt. Time, 5 23.29			

This day commences with clear weather and fresh breeze from the N. E. At day light made all sail stood on starboard tack heading S. W. all day. Finished spring main gallant sail. App at work on fore top mast stay sail. 4 P. M. washed deck chared up for Sunday. At 6 P. M. down sported sail, on the port tack. Pumps and lights care fully attended. So ends this day - all well.

Lat. by Obs., 27-00
Long. by Obs., 177-54
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 10 1/2°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.10
Thermom., Air,
" Sea,
Current,
Drift,
Wind, N. E.
" Force, Fresh
Sea, smooth
Weather, good

29th Week.]

SUNDAY, 14th JULY, 1907. (7th Sunday after Trinity.)

[195-170.]

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N21° 40' 39" } Appt. Noon, 21 49 37	Var. 1 Hour, 21' 37"	Equation of Time, increasing,		Var. 1 Hour, 0' 300s.	Sun's Semi-Diam., 15' 46"	Sidereal Time, 7h 24m 43.71s.
				Sub. from Mean Time, 5m 30.70s.	Add to Appt. Time, 5 30.73			

This day commences with
light breeze from the S. S. E.
At day light made all
sail on the Port tack by the
wind (noon) 12. steered S. E.
Mast heads up from
day light until dark
One fire seen
pumps and light attended
at. Sun down shortened
sail for the night.
all well.

Lat. by Obs., 26-41
Long. by Obs., 178-37
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 10 1/2
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths,

Barom., 30.15

Thermom., Air,

" Sea,

Current,

Drift,

Wind, S. S. E.

" Force, light

Sea, smooth

Weather, good

29th Week.]

MONDAY, 15th JULY, 1907.

[196-169.]

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N21° 40' 43" } Appt. Noon, 21 40 41	Var. 1 Hour, 22' 30"	Equation of Time, increasing,		Var. 1 Hour, 0' 279s.	Sun's Semi-Diam., 15' 46"	Sidereal Time, 7h 28m 45.26s.
				Sub. from Mean Time, 5m 37.66s.	Add to Appt. Time, 5 37.68			

This day commences with
a light breeze from the S. S. E.
Ship on the Port tack making
sail. At day light made all
sail. One fire at various jobs
about deck and rigging.
One fire back seen
left at work on new fore
topmast stay sail.
At sun down shortened
sail. Mast heads up from day
light until dark.
pumps and light care
fully attended.
ends this day
all well.

Lat. by Obs., 26-08
Long. by Obs., 179-10
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 11 0
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths,

Barom., 30.20

Thermom., Air,

" Sea,

Current,

Drift,

Wind, S. S. E.

" Force, light

Sea, smooth

Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N21° 31' 25" } Appt. Noon, 21 31 23	Var. 1 Hour, 23° 72"	Equation of Time, increasing,		Var. 1 Hour, 0° 258s.	Sun's Semi-Diam., 15' 46"	Sidereal Time, 7h 32m 41.32s.
				Sub. from Mean Time, 5m 44.11s.	Add to Appt. Time, 5 44.13			

This day commences with a fresh breeze from the North ship and the Port tack. At day light made up sail and ran the Port tack by the wind, made it x 2. Employed this A. M. making out head board. Left and second mate on fore top mast stay sail. Men employed at odd jobs about deck. One fire back seen. Mast made up fore day light until dark. Pumps and light cans fully attended to. So ends this day. All well.

Lat. by Obs., 25-50
Long. by Obs., 179-39
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 10°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.

Barom., 30.30
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S x E.
" Force, Fresh
Sea, smooth
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N21° 21' 45" } Appt. Noon, 21 21 42	Var. 1 Hour, 24° 63"	Equation of Time, increasing,		Var. 1 Hour, 0° 236s.	Sun's Semi-Diam., 15' 46"	Sidereal Time, 7h 36m 38.38s.
				Sub. from Mean Time, 5m 50.03s.	Add to Appt. Time, 5 50.05			

This day commences with light breeze from the S. S. E. At day light made sail on the Port tack. Employed this A. M. in making out after field for provisions. P. M. employed in scraping sky light. Mate drying fore top mast stay sail. My large shortened sail heading S. It x S. So ends this day. All well. Pumps and light cans fully attended to.

Lat. by Obs., 26-11
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 11°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.

Barom., 30.35
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S S E.
" Force, light
Sea, smooth
Weather, good

29th Week.]

THURSDAY, 18th JULY, 1907.

[199-166.]

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N21° 11' 43"	{ Var. 1 Hour, 25° 53"	Equation of Time, <i>increasing</i> ,		{ Var. 1 Hour, 0° 213s.	Sun's Semi-Diam., 15' 46"	Sidereal Time, 7h 40m 34.93s.
				Sub. from Mean Time, 5m 55.43s.				
		{ Appt. Noon, 21 11 40 }		Add to Appt. Time, 5 55.45 }				

Commenced with a light breeze from the E. S. E. Emp. tried at various jobs about deck. Mate emp. tried in rigging. Put up mast stay sail. At sun down shortened sail, stood on port tack. So ends this day - all well.

Lat. by Obs., 27-03
Long. by Obs., 178-33
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 11°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 30.40
Thermom., Air,
" Sea,
Current,
Drift,
Wind, E.
" Force, Light
Sea, smooth
Weather, good

29th Week.]

FRIDAY, 19th JULY, 1907.

[200-165.]

NAUT. EPHEMERIS, {	Sun's Declination, <i>decreasing</i> ,	{ Mean Noon, N21° 1' 20" Appt. Noon, 21 1 17 }	Var. 1 Hour, 26° 42"	Equation of Time, <i>increasing</i> ,			Var. 1 Hour, 0° 190s.	Sun's Semi-Diam., 15' 46"	Sidereal Time, 7h 44m 31.49s.
				Sub. from Mean Time, 6m 0.28s.					
				Add to Appt. Time, 6 0.30 }					

Commenced with a fresh breeze from the E. S. E. Emp. tried at various jobs about deck. Steered S. x E. At sun down shortened sail, stood on the Port tack. So ends this day - all well.

Lat. by Obs., 28-27
Long. by Obs., 177-54
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 11°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 30.30
Thermom., Air,
" Sea,
Current,
Drift,
Wind, E. S. E.
" Force, strong
Sea, rough
Weather, good

NAUT. EPHEMERIS.	Sun's Declination, decreasing,	{ Mean Noon, N20° 50' 35" } { Appt. Noon, 20 50 32 }	Var. 1 Hour, 27' 31"	Equation of Time, increasing.		Var. 1 Hour, 0' 167s.	Sun's Semi-Diam., 15' 46"	Sidereal Time, 7h 48m 28' 06s.
				Sub. from Mean Time, 6m 4' 57s.	Add to Appt. Time, 6 4' 59 }			

This day commenced with a strong gale from the N. E. Ship on the starboard tack under lower main top-sails. At 7.30^{a.m.} steered S. by S. At 12.30^{p.m.} took station out of starboard boats - luffed to on the Port tack making Ex. S. as per down flying head ship still on port tack. At 4.14 P.M. So ends this day - pumps and lights care fully attended - all well.

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 11'
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 29.90.
Thermom., Air,
" Sea,
Current,
Drift,
Wind, N. E.
" Force, Strong
Sea, rough
Weather, foggy bad.

NAUT. EPHEMERIS.	Sun's Declination, decreasing,	{ Mean Noon, N20° 39' 29" } { Appt. Noon, 20 39 26 }	Var. 1 Hour, 28' 13"	Equation of Time, increasing.		Var. 1 Hour, 0' 143s.	Sun's Semi-Diam., 15' 46"	Sidereal Time, 7h 52m 24' 06s.
				Sub. from Mean Time, 6m 8' 29s.	Add to Appt. Time, 6 8' 31 }			

This day commenced with a strong breeze from the S.W. Ship on the Port tack under lower topsails - Head sea. At 12.30. Took over ship. P.M. over ship again. Nothing seen all day - So ends this day - pumps and lights care fully attended - all well.

Lat. by Obs., 28-51
Long. by Obs., 177-09
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 11'
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 29.80
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S. W. S.
" Force, Strong
Sea, rough
Weather, foggy

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N20° 23' 3" } Appt. Noon, 20 23 0	Var. 1 Hour, 29'04"	Equation of Time, increasing, Sub. from Mean Time, 6m 11'45s. Add to Appt. Time, 6 11'46	Var. 1 Hour, 0'119s.	Sun's Semi-Diam., 15' 46"	Sidereal Time, 7h 56m 21'16s.

This day commences with a fresh breeze from the west, ship on the Port tack.
 6.45 A.M. ~~was~~ ship, heading to the southward, on the Port tack, under all plain sail.
 Employed at various jobs about deck.
 At sun down shortened sail. Spent five hours in general pump and light carefully attended.
 So ends this day -
 All well.

Lat. by Obs., 28-52
 Long. by Obs., 177-23
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, 11°
 Dev. used,

Steaming Time, h. m.,
 Average Speed, knots 10ths.,

Barom., 29.85
 Thermom., Air,
 „ Sea,
 Current,
 Drift,
 Wind, West
 „ Force, fresh
 Sea, ragged
 Weather, good.

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N20° 16' 15" } Appt. Noon, 20 16 12	Var. 1 Hour, 29'89"	Equation of Time, increasing, Sub. from Mean Time, 6m 14'02s. Add to Appt. Time, 6 14'03	Var. 1 Hour, 0'095s.	Sun's Semi-Diam., 15' 46"	Sidereal Time, 8h 0m 17'72s.

This day commences with a light breeze from the S. At day light made sail stood on star board tack all day. Employed in sending a new main sail, and other odd jobs about deck - ripping up fly main sail.
 Mast heads up from day light until dark.
 Pumps and light carefully attended.
 So ends this day -
 All well.

Lat. by Obs., 29-06
 Long. by Obs., 177-48
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, 11°
 Dev. used,

Steaming Time, h. m.,
 Average Speed, knots 10ths.,

Barom., 30.
 Thermom., Air,
 „ Sea,
 Current,
 Drift,
 Wind, S. St.
 „ Force, light
 Sea, ragged
 Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, decreasing, {	Mean Noon, N20° 4' 8"	{	Appt. Noon, 20 4 5	{	Var. 1 Hour, 30.74"	{	Equation of Time, increasing, Sub. from Mean Time, 6m 16.01s.	{	Add to Appt. Time, 6 16.02	{	Var. 1 Hour, 0.071s.	{	Sun's Semi-Diam., 15' 46"	{	Sidereal Time, 8h 4m 14.27s.

This day commences with light breeze from the S. S. Ship on the Port tack heading N. E. At day light made all sail At 8 A. M. wind hauled to S. S. At 11 A. M. wind hauled to the S. S. At 12.30 tacked ship steered S. At 3 P. M. wind hauled to the S. S. At sun down shortened sail from ship, headed S. Employed this day at odd jobs about the rigging. So ends this day. Mast made up from day light until dark. Pumps and lights all attended - all well.

Lat. by Obs., 28-55
Long. by Obs., 177-41
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 11°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.

Barom., 30.15
Thermom., Air,
" Sea,
Current,
Drift,
Wind, variable
" Force, light
Sea, smooth
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, decreasing, {	Mean Noon, N19° 51' 40"	{	Appt. Noon, 19 51 37	{	Var. 1 Hour, 31.57"	{	Equation of Time, increasing, Sub. from Mean Time, 6m 17.42s.	{	Add to Appt. Time, 6 17.43	{	Var. 1 Hour, 0.046s.	{	Sun's Semi-Diam., 15' 46"	{	Sidereal Time, 8h 8m 10.83s.

This day commences with light breeze from the East Ship under full sail, steering S. E. Employed at odd jobs about deck, making cord mats, and in the rigging. Out sub plumb bottom seen At sun down shortened sail huffed to on the Port tack So ends this day. Pumps and lights care fully attended - all well.

Lat. by Obs., 29.05
Long. by Obs., 177.37
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used, 11°

Steaming Time, h. m.,
Average Speed, knots faths.

Barom., 30.2
Thermom., Air,
" Sea,
Current,
Drift,
Wind, East
" Force, light
Sea, smooth
Weather, good

30th Week.]

FRIDAY, 26th JULY, 1907.

[207-158.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N19° 38' 53" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, Sun's Semi-Diam., Sidereal Time, }
 decreasing, { Appt. Noon, 19 38 50 } 32-39" Sub. from Mean Time, 6m 18-25s. Add to Appt. Time, 6 18-25 0-022s. 15' 46" 8h 12m 7-38s.

This day opens with a light breeze from the North - continues or through out the day. At day light made all sail, starting S. by E. On point in making out water and kept head up at work, repairing a cask. At sun down shortened down sail, luffed to on the star board tack. Kept head up from day light until dark - Pumps and light carefully attended to. So ends this day - all well.

Lat. by Obs., 29.50
 Long. by Obs., 176.36
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, 11°
 Dev. used,

Steaming Time, h. m.,
 Average Speed, knots roths.,

Barom., 30.20
 Thermom., Air,
 „ Sea,

Current,
 Drift,

Wind, S. by E.
 „ Force, light
 Sea, smooth
 Weather, good

30th Week.]

SATURDAY, 27th JULY, 1907.

[208-157.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N19° 25' 46" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, Sun's Semi-Diam., Sidereal Time, }
 decreasing, { Appt. Noon, 19 25 43 } 33-20" Sub. from Mean Time, 6m 18-50s. Add to Appt. Time, 6 18-50 0-002s. 15' 47" 8h 16m 3-94s.

This day had a fresh breeze from S. by E. Ship in different tacks under easy sail. Am played at odd jobs about deck. P. M. was had sick. Killed one pig. Spun down the wind sail. So ends this day. Kept head up from day light until dark. Pumps and light carefully attended to. all well.

Lat. by Obs.,
 Long. by Obs.,
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, 10 1/2
 Dev. used,

Steaming Time, h. m.,
 Average Speed, knots roths.,

Barom., 30.00
 Thermom., Air,
 „ Sea,

Current,
 Drift,
 Wind, S. by E.
 „ Force, Fresh
 Sea, smooth
 Weather, good

NAUT. EPHEMERIS,	Sun's Declination, decreasing,	Mean Noon, N19° 12' 20"	Appt. Noon, 19 12 16	Var. 1 Hour, 33.99"	Equation of Time, decreasing, Sub. from Mean Time, 6m 18.16s. Add to Appt. Time, 6 18.16	Var. 1 Hour, 0.026s.	Sun's Semi-Diam., 15' 47"	Sidereal Time, 8h 20m 0.50s.
This commenced with a light gale from the S. W., and squalls. Ship on the Port tack under storm sails - so ends this day - all well.								
Lat. by Obs., 29. 30								
Long. by Obs., 176. 0								
Course by Obs.,								
Distance by Obs.,								
" by Log,								
Var. used, 10 1/2 "								
Dev. used,								
Steaming Time, h. m.,								
Average Speed, knots roths								
Barom., 29.80								
Thermom., Air,								
" Sea,								
Current,								
Drift,								
Wind, S. W.								
" Force, Strong								
Sea, rough								
Weather, Stormy								

31st Week.]

TUESDAY, 30th JULY, 1907.

[211-154.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N18° 44' 30" } Var. 1 Hour, { Equation of Time, decreasing, } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, }
 decreasing, { Appt. Noon, 18 44 26 } 35.56" Sub. from Mean Time, 6m 15.74s. } 0.075s. 15' 47" 8h 27m 53.61s.
 Add to Appt. Time, 6 15.73 }

This day had light rain at mid - Middle and later part mid N. E. first part of day had rain squalls - Middle and later part clear
 Ship A. M. made sail steered S.

Employed in fitting the Asthucan eye pass
 At 1.30 down shortened sail
 Looped to go the star board tack heading north.
 So ends this day -
 all well.

Lat. by Obs., 28-22
 Long. by Obs., 175-33
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, 10 1/2
 Dev. used,

Steaming Time, h. m.,
 Average Speed, knots 10ths.,

Barom., 29.95
 Thermom., Air,
 „ Sea,
 Current,
 Drift,
 Wind, Variable
 „ Force, light
 Sea, smooth
 Weather, good.

31st Week.]

WEDNESDAY, 31st JULY, 1907.

[212-153.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N18° 30' 8" } Var. 1 Hour, { Equation of Time, decreasing, } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, }
 decreasing, { Appt. Noon, 18 30 4 } 36.33" Sub. from Mean Time, 6m 13.65s. } 0.099s. 15' 47" 8h 31m 50.16s.
 Add to Appt. Time, 6 13.64 }

This day comes in with light air and calms - Ship steering to the land
 Employed at odd jobs about deck
 Saw a very large piece of squid.
 At 1.30 down shortened sail by the mid, heading East.
 So ends this day
 Mast heads up from day light until dark -
 Pumps and lights all attended -
 all well.

Lat. by Obs., 28-16
 Long. by Obs.,
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, 10 1/2
 Dev. used,

Steaming Time, h. m.,
 Average Speed, knots 10ths.,

Barom., 30.00
 Thermom., Air,
 „ Sea,
 Current,
 Drift,
 Wind, Variable
 „ Force, Light
 Sea, smooth
 Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N18° 15' 27" } Appt. Noon, 18 15 23	Var. 1 Hour, 37-08"	Equation of Time, decreasing, Sub. from Mean Time, 6m 10-98s. Add to Appt. Time, 6 10-97	Var. 1 Hour, 0-124s.	Sun's Semi-Diam., 15' 47"	Sidereal Time, 8h 35m 46-72s.
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This day had fresh breeze from the S. W. At day light from ship heading S. W. S. W. made all sail & steering by the wind. Middle and late part of day more moderate. Employed this A. M. in making sword mat, and other odd jobs about deck and rigging. Several hump backs seen. Late part of day ship under all sail. Mast made up from day light until dark. Pumps and lights are fully attended to. So ends this day - all well.

Miss Church weighed 116 lbs.

Lat. by Obs., 28-22
Long. by Obs., 174-43
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 11°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.,

Barom., 30.10
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S. W.
" Force, light
Sea, smooth
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N18° 0' 28" } Appt. Noon, 18 0 24	Var. 1 Hour, 37-83"	Equation of Time, decreasing, Sub. from Mean Time, 6m 7-72s. Add to Appt. Time, 6 7-71	Var. 1 Hour, 0-148s.	Sun's Semi-Diam., 15' 47"	Sidereal Time, 8h 39m 43-27s.
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This day comes in with a light breeze from the S. W. Ship on the Port tack by the wind. At 10.30 the red ship headed S. E. - laid on sharp tack for the remainder of the day. Employed at odd jobs about deck and rigging. Several fin backs seen today. So ends this day - all well.

Lat. by Obs., 27-46
Long. by Obs., 174-27
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 11°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.,

Barom., 30.10
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S. W.
" Force, light
Sea, smooth
Weather, good

31st Week.]

SATURDAY, 3rd AUGUST, 1907.

[215-150.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N17° 45' 11" } Var. 1 Hour, { decreasing, { Appt. Noon, 17 45 7 } 38'56"

Equation of Time, decreasing, { Sub. from Mean Time, 6m 3'38s. } Var. 1 Hour, { Add to Appt. Time, 6 3'36 } 0'173s.

Sun's Semi-Diam., 15' 47"

Sidereal Time, 8h 43m 39'83s.

Lat. by Obs., 27-48

Long. by Obs., 174-19

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.

Barom., 30.10

Thermom., Air,

,, Sea,

Current,

Drift,

Wind,

,, Force,

Sea,

Weather,

32nd Week.]

SUNDAY, 4th AUGUST, 1907. (10th Sunday after Trinity.)

[216-149.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N17° 29' 37" } Var. 1 Hour, { decreasing, { Appt. Noon, 17 29 33 } 39'27"

Equation of Time, decreasing, { Sub. from Mean Time, 5m 59'44s. } Var. 1 Hour, { Add to Appt. Time, 5 59'42 } 0'197s.

Sun's Semi-Diam., 15' 47"

Sidereal Time, 8h 47m 36'38s.

Lat. by Obs., 28-26

Long. by Obs., 171-34

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.

Barom., 29.90

Thermom., Air,

,, Sea,

Current,

Drift,

Wind,

,, Force,

Sea,

Weather,

32nd Week.]

MONDAY, 5th AUGUST, 1907.

[217-148.]

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N17° 13' 46" } { Appt. Noon, 17 13 42 }	Var. 1 Hour, 39.08"	Equation of Time, decreasing, Sub. from Mean Time, 5m 54.42s. Add to Appt. Time, 5 54.40 }	Var. 1 Hour, 0.222s.	Sun's Semi-Diam., 15' 48"	Sidereal Time, 8h 51m 32.94s.

This day had fresh gale
from the N. E. It
at 6 A. M. furled the foresails
and topsails, leaving the ship to
on the Port tack heading E. & S.
Middle part of day. Breeze
moderate

At 1.30 P. M. died out calm
with heavy rain squalls

At 3.30 P. M. set the fore top
sail, late part of day calm, with
a heavy swell

Ship not having steerage
way

This A. M. broke out water
Camps and light can fully
attended

Loss of ability 2. hours + 1/2 while
the breeze lasted. Left and came jumping
around, made his stomach sick, but
still he kept his pipe going

Lat. by Obs., 28-35

Long. by Obs., 170-40

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 11°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.,

Barom., 29.80

Thermom., Air,

,, Sea,

Current,

Drift, S. E.

Wind, Variable

,, Force, Gale

Sea, rough

Weather, fair

32nd Week.]

TUESDAY, 6th AUGUST, 1907.

[218-147.]

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N16° 57' 38" } { Appt. Noon, 16 57 34 }	Var. 1 Hour, 40.68"	Equation of Time, decreasing, Sub. from Mean Time, 5m 48.81s. Add to Appt. Time, 5 48.78 }	Var. 1 Hour, 0.246s.	Sun's Semi-Diam., 15' 48"	Sidereal Time, 8h 55m 29.49s.

This day had strong breeze
from the S. E. Ship on the Port tack
by the wind, under fore sail, and
whole main topsail

10.45 A. M. set the main
sail.

Men employed this A. M.
hauling out Beech and Pork
pot sun down furled the
main sail

So ends this day -

All well.
125 miles to Norfolk Island
It 3/4 S. true.

Lat. by Obs., 28-30

Long. by Obs., 170-24

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 11°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.,

Barom., 29.85

Thermom., Air,

,, Sea,

Current,

Drift,

Wind, S. E.

,, Force, Strong

Sea, rough

Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, <i>decreasing,</i>	{ Mean Noon, N16° 41' 13" Appt. Noon, 16 41 9 }	{ Var. 1 Hour, 41' 36" }	Equation of Time, <i>decreasing,</i>		{ Var. 1 Hour, 0' 27 1s. }	Sun's Semi-Diam., 15' 48"	Sidereal Time, 8h 59m 26' 05s.
				Sub. from Mean Time, 5m 42' 61s. Add to Appt. Time, 5 42' 58				

This day commences with a fresh breeze from the S. S. It.
At 5. P. M. more ship headed to the S. E.
Employed in building potatoe boxes under the boats
At 7. A. M. raised one steamer having English colors showing to the West, showed red signal numbers she answering with answering gun out.
At 3. P. M. more ship, headed west by Smith
Ship on the Port tack by the wind,
All well.

Lat. by Obs., 28-52
Long. by Obs., 170-43
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 11°
Dev. used,

Steaming Time, h. m..
Average Speed, knots 10ths.

Barom., 29.95
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S. S. It.
" Force, Fresh
Sea, 3 smooth
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N16° 24' 33" Appt. Noon, 16 24 29 }	{ Var. 1 Hour, 42' 03" }	Equation of Time, decreasing,		{ Var. 1 Hour, 0' 29 5s. }	Sun's Semi-Diam., 15' 48"	Sidereal Time 9h 3m 22' 60s.
				Sub. from Mean Time, 5m 35' 32s. Add to Appt. Time, 5 35' 79				

This day commences with light air from the West. Ship on the Port tack at day light
7. A. M. more ship - made all sail, - Run quickly day from heading from S. S. It. to West S. It.
Employed at odd jobs about ship and deck
At sun down took in the light sails
Several hump backs seen during the day -
Must be up from day light until dark -
Pumps and light carefully attended.
All well.

Lat. by Obs., 29.00
Long. by Obs., 170-07
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 11°
Dev. used,

Steaming Time, h. m..
Average Speed, knots 10ths.

Barom., 29.90
Thermom., Air,
" Sea,
Current,
Drift,
Wind, Breeze
" Force, Fresh
Sea, 3 smooth
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N16° 7' 36" } Appt. Noon, 16 7 32	{ Var. 1 Hour, 42' 68" }	Equation of Time, decreasing,		{ Var. 1 Hour, 0' 320s. }	Sun's Semi-Diam., 15' 48"	Sidereal Time, 9h 7m 19.16s.
				Sub. from Mean Time, 5m 28.44s.	Add to Appt. Time, 5 28.41			

This day commenced with
a strong breeze from the S. E.
Ship on the Port tack all day
under courses & under topsails, and
got in for fore part of day.
Latter part of day under
lower topsails, and storm stay
sails. Must head up from day
light until dark.
Pumps and lights can fully
attended.
Sounds this day -
All well.

Lat. by Obs., 28-48
Long. by Obs., 169-46
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 11°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 29.80

Thermom., Air,

" Sea,

Current,

Drift,

Wind, S. E.

" Force, light gale

Sea, rough

Weather, good.

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N16° 50' 24" } Appt. Noon, 15 50 20	{ Var. 1 Hour, 43' 32" }	Equation of Time, decreasing,		{ Var. 1 Hour, 0' 344s. }	Sun's Semi-Diam., 15' 48"	Sidereal Time, 9h 11m 15.71s.
				Sub. from Mean Time, 5m 20.43s.	Add to Appt. Time, 5 20.45			

This day commenced with
a fresh breeze from the S. E. Ship
on the Port tack under topsails
and courses.
6.30 A.M. carried away
the flying jib, sent it in, and
sent away one.
This A.M. ship headed on
different courses - calm part
of the strike.
Tacked ship at 2.30 P.M.
Employed in repairing fly-
ing jib.
Killed a pig weighing 95 lbs.
Must head up from day
light until dark.
Pumps and lights can
fully attended.
This had deck at 4 P.M.
All well.

Lat. by Obs., 28-16
Long. by Obs., 169-20
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 11°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.0 X

Thermom., Air,

" Sea,

Current,

Drift,

Wind, variable

" Force, light

Sea, rough

Weather, good

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N15° 32' 57" } Var. 1 Hour, { Equation of Time, decreasing, } Sub. from Mean Time, 5m 11.94s, } Var. 1 Hour, { Sun's Semi-Diam., } Sidereal Time,
decreasing, { Appt. Noon, 15 32 53 } 43.95" Add to Appt. Time, 5 11.91 } 0.368s. 15' 43" 9h 15m 12.27s.

This day had light airs and
calms - Ship under all sail
First part of day spent in
may. Latter part of day had light breeze
from the S. Ship (Headsail) S. S. S.
So ends this day -
all well.

Lat. by Obs., 28-38
Long. by Obs., 169-59
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 110
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 30.10
Thermom., Air,
" Sea,
Current,
Drift,
Wind, Variable
" Force, calm
Sea, 0 smooth
Weather, good

NAUT. EPHEMERIS { Sun's Declination, { Mean Noon, N15° 15' 14" } Var. 1 Hour, { Equation of Time, decreasing, } Sub. from Mean Time, 5m 2.82s, } Var. 1 Hour, { Sun's Semi-Diam., } Sidereal Time,
decreasing, { Appt. Noon, 15 15 10 } 44.57" Add to Appt. Time, 5 2.79 } 0.392s. 15' 49" 9h 19m 8.82s.

P.M. Norfolk Island 80 miles off the
This day commenced with
thunder and lightning and heavy
rain squalls - At day light ship
under full sail and repaired topsails P.A.M.
set fore sail and lower fore topsail 9.A.M.
set main sail and jib - At 10.A.M.
carried away the foremast - Employed
the rest of the day - repairing the yard
with a hot gale - finished at 4.30
P.M.
5.30 P.M. more ship and headed
So ends this day -
all well.

Lat. by Obs., 29-39
Long. by Obs., 169-26
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 110
Dev. used, 110

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 29.90
Thermom., Air,
" Sea,
Current,
Drift,
Wind, N. by E
" Force, strong
Sea, 0 rough
Weather, rainy
and squally

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N14° 57' 17" } Var. 1 Hour, { Equation of Time, decreasing, } Var. 1 Hour, { Sun's Semi-Diam., } Sidereal Time,
decreasing, { Appt. Noon, 14 57 13 } 45' 17" { Sub. from Mean Time, 4m 53' 12s. } 0' 416s. { 15' 49" { 9h 23m 5' 38s.

This day commences with a strong breeze - Ship under long top sails and courses heading N. It. the first part of N. It. & It. during middle part of day - Late part of day headed S. E. & E.

2 P. M. set main topsail.

Employed this A. M. repairing flying jib. Mast heads up from day light until dark. Tumps and lights carefully attended.

4 P. M. Norfolk Isld. bore S. E. & S. distance 63 miles, by the ^{nominal} chronometer.

So ends this day - Antone Rosa off duty sick, with asthma -

Lat. by Obs., 28-48
Long. by Obs., 169-10 1/2
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 11°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.,

Barom., 30.
Thermom., Air,
" Sea,

Current,

Drift,

Wind, S. E. & E.

" Force, strong

Sea, rough

Weather, good

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, N14° 39' 6" } Var. 1 Hour, { Equation of Time, decreasing, } Var. 1 Hour, { Sun's Semi-Diam., } Sidereal Time,
decreasing, { Appt. Noon, 14 39 2 } 45' 76" { Sub. from Mean Time, 4m 42' 85s. } 0' 440s. { 15' 49" { 9h 27m 1' 38s.

This day commences with a fresh breeze from the S. It. Ship under the Port & Star heading S. E. & E. & N. It.

at 2. 30 am one ship headed S. E. & S. for the remainder of day. This A. M. employed for odd job about deck.

P. M. we bent the flying jib sent it in. Sent the repaired one. Sent two cloths, out of the new sent in, as it was too heavy.

Mast heads up from day light until dark - Tumps and lights carefully attended.

So ends this day
All well.

Lat. by Obs., 28-16
Long. by Obs., 168-31
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 11°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.,

Barom., 30.1
Thermom., Air,
" Sea,

Current,

Drift,

Wind, S. It.

" Force, light

Sea, smooth

Weather, good.

33rd Week.]

THURSDAY, 15th AUGUST, 1907.

[227-138.]

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N14° 20' 41" } Appt. Noon, 14 20 37	{ Var. 1 Hour, 46' 33" }	Equation of Time, decreasing, Sub. from Mean Time, 4m 32' 01s. Add to Appt. Time, 4 31' 98	{ Var. 1 Hour, 0' 463s. }	Sun's Semi-Diam., 15' 49"	Sidereal Time, 9h 30m 58' 49s.

This day commences with a light breeze from the S. St. ship under full sail on the starboard tack by the wind, heading from S. to S. E.

Employed his time in the afternoon for provisions, finished at 2.30 P.M.

At 12 noon raised a sail to the Eastward, proved to be a fair master's lark, pointing to the westward.

Went heads up from day light until dark. Pumps and lights - can fully attended to. So ends this day all well.

Lat. by Obs., 28-40
Long. by Obs., 168-53
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used, 110

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 30.10
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S. St.
" Force, light
Sea, smooth
Weather, good.

33rd Week.]

FRIDAY, 16th AUGUST, 1907.

[228-137.]

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N14° 2' 2" } Appt. Noon, 14 1 58	{ Var. 1 Hour, 46' 30" }	Equation of Time, decreasing, Sub. from Mean Time, 4m 20' 62s. Add to Appt. Time, 4 20' 58	{ Var. 1 Hour, 0' 486s. }	Sun's Semi-Diam., 15' 49"	Sidereal Time, 9h 34m 55' 04s.

This day commences with a fresh breeze from the S. St. at 6.30 A.M. our ship headed S. St. our sail in sight same vessel we saw yesterday, probably our ship to the westward. Fresh breeze in the fore part of day employed in fixing stuts with iron whale line and rearing mainmast cleets. At 3 P.M. employed at odd jobs about cleets. At 3 P.M. set main gallant sail and got topsail at noon and headed to the south.

Lat and Longitude by Sonne's method at 10 A.M. placed ship in Lat. 28-59 - Long 168-59 - Longitude by chronometers 168-47 - Lat by moon placed ship in Lat. 28-51.53 North - At 2 P.M. raised main half a point on port bow then placed band 110 miles off - bearing S x S 1/4 S. So ends this day all well.

Lat. by Obs., 28-52
Long. by Obs., 168-47
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used, 110

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 30.20
Thermom., Air,
" Sea,
Current,
Drift,
Wind, variable
" Force, fresh
Sea, smooth
Weather, good.

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N13° 43' 9" } Var. 1 Hour, 47' 44"	{ Equation of Time, decreasing, Sub. from Mean Time, 4m 8' 68s. } Var. 1 Hour, 0' 509s.	Sun's Semi-Diam., 15' 49"	Sidereal Time, 9h 38m 51' 60s.
		{ Appt. Noon, 13 43 6 }	{ Add to Appt. Time, 4 8 64 }		

This day commenced with a calm ship steering in toward Norfolk Island, Norfolk Island bearing S. by E. 1/2 E. 1/2 S. ship under all sail, Employed at odd jobs about deck 11 A.M. This killed one pig, washed at Island bearing S. 1/2 S. distance by estimation, 15 miles. It ends this day - All well.

Lat. by Obs., 28-50
Long. by Obs., 168-16
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 110
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.30
Thermom., Air,
" Sea,
Current,
Drift,
Wind, Light breeze
" Force,
Sea, smooth
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N13° 24' 4" } Var. 1 Hour, 47' 95"	{ Equation of Time, decreasing, Sub. from Mean Time, 3m 56' 19s. } Var. 1 Hour, 0' 531s.	Sun's Semi-Diam., 15' 50"	Sidereal Time, 9h 42m 48' 15s.
		{ Appt. Noon, 13 24 1 }	{ Add to Appt. Time, 3 56 16 }		

At 9.10 - Capt and Mrs. Church - with no ship - a left the ship - found further off, than thought for - At 1.45 landed at Norfolk Island, a little tired but otherwise all well - 6. P.M. - Mr. Mantey and boat crew - went off to the ship.

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom.,
Thermom., Air,
" Sea,
Current,
Drift,
Wind,
" Force,
Sea,
Weather,

Nautical Diary and Day's Work Book.

C. Hicks from Imp. Ch. Lane to
 MONDAY, 19th AUGUST, 1907.

34th Week.]

MONDAY, 19th AUGUST, 1907.

[231-134.]

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{	Mean Noon, N13° 4' 46"	{	Var. 1 Hour,	Equation of Time, decreasing, Sub. from Mean Time, 3m 43.18s.	{	Var. 1 Hour,	Sun's Semi-Diam.,	Sidereal Time,
			Appt. Noon, 13 4 43		48.50"	Add to Appt. Time, 3 43.15		0.553s.	15' 50"	9h 46m 44.70s.

Lat. by Obs.,

Long. by Obs.,

Course by Obs.,

Distance by Obs.,

„ by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.,

Barom.,

Thermom., Air,

„ Sea,

Current,

Drift,

Wind,

„ Force,

Sea,

Weather,

34th Week.]

TUESDAY, 20th AUGUST, 1907.

[232-133.]

NAUT. EPHEMERIS.	{ Sun's Declination, decreasing,	{ Mean Noon, N12° 45' 16"	Var. 1 Hour, 49' 01"	Equation of Time, <i>decreasing</i> , Sub. from Mean Time, 3m 29.65s. Add to Appt. Time, 3 29.62	{ Var. 1 Hour, 0' 57.4s.	Sun's Semi-Diam., 15' 50"	Sidereal Time, 9h 50m 41.26s.
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Lat. by Obs.,

Long. by Obs.,

Course by Obs.,

Distance by Obs.,

„ by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed,	knots	10ths.
10.0	0	0
10.1	1	0
10.2	2	0
10.3	3	0
10.4	4	0
10.5	5	0
10.6	6	0
10.7	7	0
10.8	8	0
10.9	9	0
11.0	0	1
11.1	1	1
11.2	2	1
11.3	3	1
11.4	4	1
11.5	5	1
11.6	6	1
11.7	7	1
11.8	8	1
11.9	9	1
12.0	0	2
12.1	1	2
12.2	2	2
12.3	3	2
12.4	4	2
12.5	5	2
12.6	6	2
12.7	7	2
12.8	8	2
12.9	9	2
13.0	0	3
13.1	1	3
13.2	2	3
13.3	3	3
13.4	4	3
13.5	5	3
13.6	6	3
13.7	7	3
13.8	8	3
13.9	9	3
14.0	0	4
14.1	1	4
14.2	2	4
14.3	3	4
14.4	4	4
14.5	5	4
14.6	6	4
14.7	7	4
14.8	8	4
14.9	9	4
15.0	0	5
15.1	1	5
15.2	2	5
15.3	3	5
15.4	4	5
15.5	5	5
15.6	6	5
15.7	7	5
15.8	8	5
15.9	9	5
16.0	0	6
16.1	1	6
16.2	2	6
16.3	3	6
16.4	4	6
16.5	5	6
16.6	6	6
16.7	7	6
16.8	8	6
16.9	9	6
17.0	0	7
17.1	1	7
17.2	2	7
17.3	3	7
17.4	4	7
17.5	5	7
17.6	6	7
17.7	7	7
17.8	8	7
17.9	9	7
18.0	0	8
18.1	1	8
18.2	2	8
18.3	3	8
18.4	4	8
18.5	5	8
18.6	6	8
18.7	7	8
18.8	8	8
18.9	9	8
19.0	0	9
19.1	1	9
19.2	2	9
19.3	3	9
19.4	4	9
19.5	5	9
19.6	6	9
19.7	7	9
19.8	8	9
19.9	9	9

Barom.,

Thermom., Air,

11 See.

Current,

Drift,

Wind,

Force,

Sea,

Weather,

NAUT. EPHEMERIS,	Sun's Declination, decreasing,	{ Mean Noon, N12° 25' 33" } { Appt. Noon, 12 25 31 }	Var. 1 Hour, 49-50"	Equation of Time, decreasing,		Var. 1 Hour, 0-594s.	Sun's Semi-Diam., 15' 50"	Sidereal Time, 9h 54m 37-81s.
				Sub. from Mean Time, 3m 15-63s.	Add to Appt. Time, 3 15-60			

Standard watch on shore for liberty-

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
 " by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom.,
Thermom., Air,
 " Sea,
Current,
Drift,
Wind,
 " Force,
Sea,
Weather,

NAUT. EPHEMERIS,	Sun's Declination, decreasing,	{ Mean Noon, N12° 5' 39" } { Appt. Noon, 12 5 37 }	Var. 1 Hour, 49-58"	Equation of Time, decreasing,		Var. 1 Hour, 0-614s.	Sun's Semi-Diam., 15' 50"	Sidereal Time, 9h 58m 34-37s.
				Sub. from Mean Time, 3m 1-12s.	Add to Appt. Time, 3 1-09			

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
 " by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom.,
Thermom., Air,
 " Sea,
Current,
Drift,
Wind,
 " Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, <i>decreasing</i> ,	{ Mean Noon, N11° 45' 34" } Appt. Noon, 11 45 31 }	Var. 1 Hour, 50'46"	Equation of Time, <i>decreasing</i> ,		Var. 1 Hour, 0'633s.	Sun's Semi-Diam., 15' 51"	Sidereal Time, 10h 2m 30'92s.
				Sub. from Mean Time, 2m 46'15s. Add to Appt. Time, 2 46'12 }				

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
 „ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roth.,

Barom.,
Thermom., Air,
 „ Sea,
Current,
Drift,
Wind,
 „ Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, <i>decreasing</i> ,	{ Mean Noon, N11° 25' 17" } Appt. Noon, 11 25 15 }	Var. 1 Hour, 50'02"	Equation of Time, <i>decreasing</i> ,		Var. 1 Hour, 0'651s.	Sun's Semi-Diam., 15' 51"	Sidereal Time, 10h 6m 27'47s.
				Sub. from Mean Time, 2m 30'73s. Add to Appt. Time, 2 30'70 }				

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
 „ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roth.,

Barom.,
Thermom., Air,
 „ Sea,
Current,
Drift,
Wind,
 „ Force,
Sea,
Weather,

NAUT. EPHEMERIS,	{	Sun's Declination, decreasing,	{	Mean Noon, N11° 4' 49"	{	Var. 1 Hour, 51'36"	Equation of Time, decreasing.		{	Var. 1 Hour, 0'669s.	Sun's Semi-Diam., 15' 51"	Sidereal Time, 10h 10m 24'03s.
							Sub. from Mean Time, 2m 14'57s.	Add to Appt. Time, 2 14'55				

Port watch on shore for Liberty -	Lat. by Obs., Long. by Obs., Course by Obs., Distance by Obs., " by Log, Var. used, Dev. used, Steaming Time, h. m., Average Speed, knots 10ths., Barom., Thermom., Air, " Sea, Current, Drift, Wind, " Force, Sea, Weather,
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NAUT. EPHEMERIS,	{	Sun's Declination, decreasing,	{	Mean Noon, N10° 44' 11"	{	Var. 1 Hour, 51'80"	Equation of Time, decreasing.		{	Var. 1 Hour, 0'686s.	Sun's Semi-Diam., 15' 51"	Sidereal Time, 10h 14m 20'58s.
							Sub. from Mean Time, 1m 58'61s.	Add to Appt. Time, 1 58'59				

	Lat. by Obs., Long. by Obs., Course by Obs., Distance by Obs., " by Log, Var. used, Dev. used, Steaming Time, h. m., Average Speed, knots 10ths., Barom., Thermom., Air, " Sea, Current, Drift, Wind, " Force, Sea, Weather,
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Nautical Diary and Day's Work Book.				from	to				
35th Week.]		TUESDAY, 27th AUGUST, 1907.			[239-126.]				
NAUT. EPHEMERIS, {		Sun's Declination, {	Mean Noon, N10° 23' 23"	Var. 1 Hour, {	Equation of Time, <i>decreasing</i> , {	Sub. from Mean Time, 1m 41.96s. }	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
		<i>decreasing</i> , {	Appt. Noon, 10 23 21 }	52.22"		Add to Appt. Time, 1 41.94 }	0.702s. }	15' 51"	10h 18m 17.13s. }

35th Week.]		WEDNESDAY, 28th AUGUST, 1907.				[240-125.]					
NAUT. EPHEMERIS, {		Sun's Declination, {		Mean Noon, N10° 2' 24" } Var. 1 Hour, {		Equation of Time, <i>decreasing</i> , {		Sun's Semi-Diam., {		Sidereal Time, {	
		decreasing, {		Appt. Noon, 10 2 23 } 52.63" }		Sub. from Mean Time, 1m 24.93s. }		15' 52" }		10h 22m 13.69s. }	
						Add to Appt. Time, 1 24.91 }		0.717s. }			

Nautical Diary and Day's Work Book,

from

to

35th Week.]

THURSDAY, 29th AUGUST, 1907.

[241-124.]

NAUT. EPHEMERIS, {

Sun's Declination,
decreasing,

{ Mean Noon, N 9° 41' 16"

Appt. Noon, 9 41 15 }

Var. 1 Hour,
53.02"

Equation of Time, decreasing,
Sub. from Mean Time, 1m 7.54s
Add to Appt. Time, 1 7.52 }

Var. 1 Hour,
0.732s.

Sun's Semi-Diam.,
15' 52"

Sidereal Time,
10h 26m 10.24s.

after

Starboard watch
Port watch came on board
safety.

Lat. by Obs.,

Long. by Obs.,

Course by Obs.,

Distance by Obs.,

" by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots roths.,

Barom.,

Thermom., Air,

" Sea,

Current,

Drift,

Wind,

" Force,

Sea,

Weather,

35th Week.]

FRIDAY, 30th AUGUST, 1907.

[242-123.]

NAUT. EPHEMERIS, {

Sun's Declination,
decreasing,

{ Mean Noon, N 9° 19' 59"

Appt. Noon, 9 19 58 }

Var. 1 Hour,
53.40"

Equation of Time, decreasing,
Sub. from Mean Time, 0m 49.80s
Add to Appt. Time, 0 49.79 }

Var. 1 Hour,
0.746s.

Sun's Semi-Diam.,
15' 52"

Sidereal Time,
10h 30m 6.79s.

Lat. by Obs.,

Long. by Obs.,

Course by Obs.,

Distance by Obs.,

" by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots roths.,

Barom.,

Thermom., Air,

" Sea,

Current,

Drift,

Wind,

" Force,

Sea,

Weather,

Nautical Diary and Day's Work Book,fromto

35th Week.]SATURDAY, 31st AUGUST, 1907.[243-122.]

NAUT. EPHEMERIS, { Sun's Declination, decreasing, { Mean Noon, N 8° 58' 32" } Var. 1 Hour, 53.77" { Equation of Time, decreasing, Sub. from Mean Time, 0m 31.74s. } Var. 1 Hour, 0.759s. Sun's Semi-Diam., 15' 52" Sidereal Time, 10h 34m 3.35s.

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
„ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom.,
Thermom., Air,
„ Sea,
Current,
Drift,
Wind,
„ Force,
Sea,
Weather,

36th Week.]SUNDAY, 1st SEPTEMBER, 1907. (14th Sunday after Trinity.)[244-121.]

NAUT. EPHEMERIS, { Sun's Declination, decreasing, { Mean Noon, N 8° 36' 57" } Var. 1 Hour, 54.13" { Equation of Time, decreasing, Sub. from Mean Time, 0m 13.37s. } Var. 1 Hour, 0.771s. Sun's Semi-Diam., 15' 53" Sidereal Time, 10h 37m 59.90s.

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
„ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom.,
Thermom., Air,
„ Sea,
Current,
Drift,
Wind,
„ Force,
Sea,
Weather,

NAUT. EPHEMERIS, {				Equation of Time, <i>increasing</i> ,		Var. 1 Hour,	Sun's Semi-Diam., 15' 53"	Sidereal Time, 10h 41m 56' 45s.
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{				{		0 5' 30s. 0 5' 30	0' 784s.	
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NAUT. EPHEMERIS, {	Sun's Declination, <i>decreasing,</i>	{	Mean Noon, N 6° 2' 15"	{	Appt. Noon, 6 2 17 }	Var. 1 Hour, 56.23"	Equation of Time, <i>increasing,</i>		Var. 1 Hour, 0.843s.	Sun's Semi-Diam., 15' 54"	Sidereal Time, 11h 5m 35.77s.
							Add to Mean Time, 2m 27.1s.				
							Sub. from Appt. Time, 2 2.68				

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
 „ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots fms.,

Barom.,
Thermom., Air,
 „ Sea,
Current,
Drift,
Wind,
 „ Force,
Sea, ☉
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, <i>decreasing,</i>	{	Mean Noon, N 5° 39' 43"	{	Appt. Noon, 5 39 45 }	Var. 1 Hour, 56.47"	Equation of Time, <i>increasing,</i>		Var. 1 Hour, 0.850s.	Sun's Semi-Diam., 15' 54"	Sidereal Time 11h 9m 32.32s.
							Add to Mean Time, 2m 23.03s.				
							Sub. from Appt. Time, 2 23.00				

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
 „ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots fms.,

Barom.,
Thermom., Air,
 „ Sea,
Current,
Drift,
Wind,
 „ Force,
Sea, ☉
Weather,

NAUT. EPHEMERIS,	{	Sun's Declination, <i>decreasing</i> ,	{	Mean Noon, N 4° 31' 31" Appt. Noon, 4 31 34 }	{	Var. 1 Hour, 57.12"	{	Equation of Time, <i>increasing</i> ,		{	Var. 1 Hour, 0.869s.	Sun's Semi-Diam., 16' 55"	Sidereal Time, 11h 21m 21.98s.
								Add to	Mean Time, 3m 25.01s.				

Sub. from Appt. Time, 3 24.96 }

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
 „ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom.,
Thermom., Air,
 „ Sea,
Current,
Drift,
Wind,
 „ Force,
Sea, ☉
Weather,

NAUT. EPHEMERIS	{	Sun's Declination, <i>decreasing</i> ,	{	Mean Noon, N 4° 8' 38" Appt. Noon, 4 8 41 }	{	Var. 1 Hour, 57.31"	{	Equation of Time, <i>increasing</i> ,		{	Var. 1 Hour, 0.874s.	Sun's Semi-Diam., 16' 55"	Sidereal Time 11h 25m 18.53s.
								Add to	Mean Time, 3m 45.96s.				

Sub. from Appt. Time, 3 45.89 }

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
 „ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom.,
Thermom., Air,
 „ Sea,
Current,
Drift,
Wind,
 „ Force,
Sea, ☉
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N 3° 45' 40"	{ Appt. Noon, 3 45 44 }	Var. 1 Hour, 57' 48"	{	Equation of Time, increasing, Add to Mean Time, 4m 7' 00s.	{	Sub. from Appt. Time, 4 6' 94 }	Var. 1 Hour, 0' 879s.	Sun's Semi-Diam., 15' 56"	Sidereal Time, 11h 29m 15' 09s.
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Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
 „ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.,

Barom.,
Thermom., Air,
 „ Sea,
Current,
Drift,
Wind,
 „ Force,
Sea,
Weather,

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, N 3° 23' 38"	{ Appt. Noon, 3 22 42 }	Var. 1 Hour, 57' 63"	{	Equation of Time, increasing, Add to Mean Time, 4m 23' 15s.	{	Sub. from Appt. Time, 4 28' 08 }	Var. 1 Hour, 0' 883s.	Sun's Semi-Diam., 15' 56"	Sidereal Time, 11h 33m 11' 64s.
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Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
 „ by Log,
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.,

Barom.,
Thermom., Air,
 „ Sea,
Current,
Drift,
Wind,
 „ Force,
Sea,
Weather,

NAUT. EPHEMERIS, {			Sun's Declination, {			Mean Noon, N 1° 26' 42" } Var. 1 Hour,			Equation of Time, <i>increasing</i> , {			Add to Mean Time, 6m 14' 55s. } Var. 1 Hour,			Sun's Semi-Diam.,			Sidereal Time,		
			<i>decreasing</i> , {			Appt. Noon, 1 26 48 } 53° 21"			Sub. from Appt. Time, 6 14' 46 }			0° 38' 6s.			15' 57"			11h 52m 54' 40s.		

NAUT. EPHEMERIS,	Sun's Declination, <i>decreasing,</i>	{ Mean Noon, N 0° 40' 3" } { Appt. Noon, 0 40 10 }	Var. 1 Hour, 58' 36"	Equation of Time, <i>increasing,</i>		Var. 1 Hour, 0' 58.1s.	Sun's Semi-Diam., 15' 58"	Sidereal Time, 12h 0m 47.61s.
				Add to Mean Time, 6m 57.00s.				
				Sub. from Appt. Time, 6 56.90				

This day commences with light variable winds, ship under all sail, working to the S. E. Land plain in sight for some - Later part of day light breeze from the N. E. - (Ship heading East.)
Sundays this day -
all well.

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 11°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 30.4
Thermom., Air,
" Sea,
Current,
Drift,
Wind, Variable
" Force, light
Sea, smooth
Weather, good.

NAUT. EPHEMERIS,	{ Sun's Declination, decreasing,	{ Mean Noon, N 0° 16' 41" } { Appt. Noon, 0 16 48 }	Var. 1 Hour, 58' 40"	Equation of Time, <i>increasing</i> ,		Var. 1 Hour, 0' 57.7s.	Sun's Semi-Diam., 15' 58"	Sidereal Time, 12h 4m 44.06s.
				Add to Mean Time, 7m 18.11s.				
				Sub. from Appt. Time, 7 18 00				

This day commences with light variable winds - ship under all sail, working to the S. E. No land in sight. Employed in furling lines, took up foremast, put anchors on the bow, and put the chains below.
Sundays this day -
Pumps and lights - well attended -
all well.

Lat. by Obs., 30.48
Long. by Obs., 169.15
Course by Obs.,
Distance by Obs., 95
" by Log,
Var. used, 11°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 30.30
Thermom., Air,
" Sea,
Current,
Drift,
Wind, South
" Force, light
Sea, smooth
Weather, good.

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, S 0° 6' 41"	Var. 1 Hour, {	Equation of Time, increasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	increasing,	{ Appt. Noon, 0 6 34 }	58' 44"	Add to Mean Time, 7m 39' 10s.	0' 871s.	15' 58"	12h 8m 40' 61s.
				Sub. from Appt. Time, 7 33' 98			

This day commences with a light breeze from the S.W. Ship under full sail, steering E. S. E. by compass.

This A. M. employed in making out water.

P. M. Employed at odd jobs about deck.

Carpenter at work on chum bucket.

Copper at work making

pumps.

This P. M. washed deck

so winds this day - all

well.

Lat. by Obs., 29-53'

Long. by Obs., 170-02'

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots roths.,

Barom., 30.50

Thermom., Air,

,, Sea,

Current,

Drift,

Wind,

,, Force,

Sea,

Weather,

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, S 0° 30' 5"	Var. 1 Hour, {	Equation of Time, increasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	increasing,	{ Appt. Noon, 0 29 57 }	58' 47"	Add to Mean Time, 7m 59' 95s.	0' 865s.	15' 59"	12h 12m 37' 16s.
				Sub. from Appt. Time, 7 59' 83			

This day commences with a fresh breeze from the S.W. Ship under full sail, steering E. S. E.

M. M. Employed in picking

over sweet potatoes - Carpenter

making spar. and other odd

jobs about the deck.

So winds this day -

Must hoist up from day

light until dark - all

attended -

all well.

Lat. by Obs., 30-43'

Long. by Obs., 171-42'

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots roths.,

Barom., 30.20

Thermom., Air,

,, Sea,

Current,

Drift,

Wind,

,, Force,

Sea,

Weather,

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S 0° 53' 28" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, }
increasing, { Appt. Noon, 0 53 20 } 58' 47" Add to Mean Time, 8m 20' 54s. } 0' 55s. 15' 59" 12h 16m 33' 72s.

This day commences with a strong breeze from the S. S. ship sleeping E. S. E. employed at odd jobs about dusk at 11.30. Wind hauled in squalls to the south took in main royal, and main gallant sail. 1 P.M. wind hauled back to S. Later part of day steering E x S. Sun down ship under topsails and fore sails. Weather thick and cloudy. 20 miles this day - all well. Pumps and lights carefully attended.

Lat. by Obs., 31-45
Long. by Obs., 174-05
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,
Steaming Time, h. m.,
Average Speed, knots roths.,
Barom., 30-10
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S. S. E.
" Force, strong
Sea, smooth
Weather, cloudy.

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S 1° 16' 52" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, }
increasing, { Appt. Noon, 1 16 44 } 58' 47" Add to Mean Time, 8m 41' 15s. } 0' 55s. 15' 59" 12h 20m 30' 27s.

This day commences with a fresh breeze from the S. S. ship under topsails and fore sails steering E. S. E. Employed at odd jobs about dusk. Later part of day steering E x S. 20 miles this day. all well. Pumps and lights carefully attended.

Lat. by Obs., 32-46
Long. by Obs., 176-48
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,
Steaming Time, h. m.,
Average Speed, knots roths.,
Barom., 30-10
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S. S. E.
" Force, fresh
Sea, smooth
Weather, good

NAUT. EPHEMERIS,	Sun's Declination, increasing,	{ Mean Noon, S 1° 40' 18" } { Appt. Noon, 1 40 7 }	Var. 1 Hour, 58' 45"	Equation of Time, increasing,		Var. 1 Hour, 0' 841s.	Sun's Semi-Diam., 15' 59"	Sidereal Time, 12h 24m 26' 32s.
				Add to	Mean Time, 9m 1' 45s.			
				Sub. from	Appt. Time, 9 1' 32			

This day commences with a fresh breeze from the S. S. Ship under topsails and fore sails steering E. & S.

This A. M. hauled a bullock, 1564 lbs dressed. This P. M. washed deck.

Mast heads up from day light until dark.

Pumps and light care fully attended -

So ends this day.

All well.

Saturday 28-07

Lat 34-30 Long 178-30 This day commences with a fresh breeze from the S. S. Ship under topsails and main gallant sail steering E. & S. E. at our down steering S. E. & E. Called this day Saturday as we crossed the 180 meridian, and put us one day back - So ends this day - all well. Pumps and light carefully attended - (Weather) squally - (sea) ruffled

Lat. by Obs., 33-27

Long. by Obs., 178-57

Course by Obs.,

Distance by Obs.,

„ by Log,

Var. used, 12

Dev. used,

Steaming Time, h. m.,

Average Speed, knots roths.,

Barom., 30.

Thermom., Air,

„ Sea,

Current,

Drift,

Wind, S. S. E.

„ Force, fresh

Sea, smooth

Weather, cloudy

NAUT. EPHEMERIS,	Sun's Declination, increasing,	{ Mean Noon, S 2° 3' 39" } { Appt. Noon, 2 3 30 }	Var. 1 Hour, 58' 42"	Equation of Time, increasing,		Var. 1 Hour, 0' 831s.	Sun's Semi-Diam., 16' 0"	Sidereal Time, 12h 28m 23' 37s.
				Add to	Mean Time, 9m 21' 52s.			
				Sub. from	Appt. Time, 9 21' 40			

This day opens with a strong breeze from the West - Ship under lower topsails and fore sails at day light steered E. & S. This A. M. chafed and chafed - P. M. had heavy hail squalls, our down shortened sail for the night, luffed to, on the Port tack heading N. & S. So ends this day.

Pumps and light care fully attended -

All well.

Lat. by Obs., 35-12

Long. by Obs., 176-33

Course by Obs.,

Distance by Obs.,

„ by Log,

Var. used, 120

Dev. used,

Steaming Time, h. m.,

Average Speed, knots roths.,

Barom., 29.60

Thermom., Air,

„ Sea,

Current,

Drift,

Wind, West

„ Force, strong

Sea, rough

Weather, squally

NAUT. EPHEMERIS, {	Sun's Declination, <i>increasing,</i>	{	Mean Noon, S 2° 27' 1"	Var. 1 Hour,	Equation of Time, <i>increasing,</i>		Var. 1 Hour,	Sun's Semi-Diam.,	Sidereal Time,
					Add to Mean Time, 9m 41 36a.				
					Sub. from Appt. Time, 9 41 22 }				
			Appt. Noon, 2 26 51 }	58 38"		0 520a.	16' 0"	12h 32m 19.93s.	

This day commenced with a light gale from the West. 7.30 A.M. Steered E x N. under top sail and fore sail. At 1 P.M. hove to under short sail - Saw large school of black fish. To end this day - Pumps and lights carefully attended. All well. Broke out slop chest. Gar me man again but fit' and all hands had a share of fro & shovs, &c.

Lat. by Obs., 35-00
Long. by Obs., 173-21
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12"
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 29.80
Thermom., Air,
" Sea,
Current,
Drift,
Wind, Light
" Force, Strong
Sea, mixed
Weather, foggy

NAUT. EPHEMERIS, {	Sun's Declination, <i>increasing,</i>	{	Mean Noon, S 2° 50' 21"	Var. 1 Hour,	Equation of Time, <i>increasing,</i>		Var. 1 Hour,	Sun's Semi-Diam., 16' 0"	Sidereal Time, 12h 36m 16.48s.
					Add to Mean Time, 10m 0.92s.				
					Sub. from Appt. Time, 10 0.78				
			Appt. Noon, 2 50 12 }	58.32"			0.809s.		

This day commenced with a fresh breeze from the N. N. E. At day light raised spruce whalco, going to the windward side of the bay. At 9.30 A.M. steered E. S. E. Employed at odd jobs about deck. Biggest part of crew sick with cramps and dysentery. At sun down three to me the port tack under lower main top sail, heading N x E. To end this day. All sick with cramps etc. Pumps and lights carefully attended.

Lat. by Obs., —
Long. by Obs., —
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12"
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 30.10
Thermom., Air,
" Sea,
Current,
Drift,
Wind, N. N. E.
" Force, fresh
Sea, smooth
Weather, good

40th Week.]

WEDNESDAY, 2nd OCTOBER, 1907.

[275-90.]

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, S 3° 13' 41"	{ Appt. Noon, 3 13 31 }	Var. 1 Hour, 58' 24"	Equation of Time, increasing,		Var. 1 Hour, 0' 797s.	Sun's Semi-Diam., 16' 1"	Sidereal Time, 12h 40m 13' 03s.
					Add to Mean Time, 10m 20' 20s.	Sub. from Appt. Time, 10 20' 06			

This day commenced with a strong breeze from the N. N. E. ship under top sails and fore sails steering E. Employed at odd jobs about dusk.

At sun down raised a stranger steering N. N. E.

Sounds that day - Pumps and light all attended all well.

Lat. by Obs., —
Long. by Obs., —
Course by Obs., —
Distance by Obs., —
" by Log, —
Var. used, 124
Dev. used, —

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.
Thermom., Air,
" Sea,
Current,
Drift, N. N. E.
Wind, Strong
" Force, Strong
Sea, rough
Weather, cloudy

40th Week.]

THURSDAY, 3rd OCTOBER, 1907.

[276-89.]

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, S 3° 36' 58"	{ Appt. Noon, 3 36 47 }	Var. 1 Hour, 58' 15"	Equation of Time, increasing,		Var. 1 Hour, 0' 784s.	Sun's Semi-Diam., 16' 1"	Sidereal Time, 12h 44m 9' 58s.
					Add to Mean Time, 10m 39' 18s.	Sub. from Appt. Time, 10 39' 04			

This day commenced with a strong breeze from the N. N. E. ship here too in the port two under storm sails. Employed about dusk at odd jobs. At 8 P.M. raised an English ship - steering E. S. E. to catch this day. Pumps etc - carefully attended all well.

Lat. by Obs., 35-30
Long. by Obs., 172-02
Course by Obs., —
Distance by Obs., —
" by Log, —
Var. used, 120
Dev. used, —

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 29.70
Thermom., Air,
" Sea,
Current,
Drift, —
Wind, N. N. E.
" Force, light breeze
Sea, rough
Weather, cloudy

40th Week.]

FRIDAY, 4th OCTOBER, 1907.

[277-88.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S 4° 0' 12" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, { Sun's Semi-Diam., } Sidereal Time, }
 increasing, { Appt. Noon, 4 0 2 } 58' 04" { Add to Mean Time, 10m 57' 33s. } 0' 770s. { 16' 1" { 12h 48m 6' 14s.

This day commenced with a
 strong breeze from the N.W. ship
 was in the port tack. At 10 A.M.
 carried away the mainmast the
 madder head, secured the madder
 and made new land
 employed at odd jobs about
 deck.

At sun down good weather
 with heavy swell
 So ends this day.
 all well
 Pumps and etc all
 attended

Lat. by Obs., 35-20
 Long. by Obs., 172-20
 Course by Obs.,
 Distance by Obs.,
 " by Log,
 Var. used, 12'
 Dev. used,

Steaming Time, h. m.,
 Average Speed, knots roths.,

Barom., 29.90

Thermom., Air,

" Sea,

Current,

Drift,

Wind, S.W.

" Force, strong

Sea, rough

Weather, good

40th Week.]

SATURDAY, 5th OCTOBER, 1907.

[278 87.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S 4° 23' 24" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, { Sun's Semi-Diam., } Sidereal Time, }
 increasing, { Appt. Noon, 4 23 13 } 57' 99" { Add to Mean Time, 11m 16' 14s. } 0' 755s. { 16' 1" { 12h 52m 2' 69s.

This day commenced with
 a fresh breeze from the N.W. At
 day light made sail, steered E.S.E.
 This A.M. saw several fin
 backs and quite a number of
 birds

At sun down shortened sail
 on the port tack heading N.

So ends this day
 Pumps etc carefully attended
 all well.

Lat. by Obs., 35-25
 Long. by Obs., 170-21
 Course by Obs.,
 Distance by Obs.,
 " by Log,
 Var. used, 12'
 Dev. used,

Steaming Time, h. m.,
 Average Speed, knots roths.,

Barom., 30.10

Thermom., Air,

" Sea,

Current,

Drift,

Wind, S.W.

" Force, fresh

Sea, rough

Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{	Mean Noon, S 4° 46' 33"	{	Appt. Noon, 4 46 22	Var. 1 Hour, 57.79"	Equation of Time, increasing,			{	Var. 1 Hour, 0.740s.	{	Sun's Semi-Diam., 16' 2"	{	Sidereal Time, 12h 55m 59.24s.
							Add to Mean Time, 11m 34.09s.								
							Sub. from Appt. Time, 11 33.95								

This day commences with a dead calm and continues so for the twenty four hours. Mast heads up from day light until dark. Pumps and lights are fully attended to. It ends this day - all well.

Lat. by Obs., 35-10
Long. by Obs., 170-14
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 1.2"
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.

Barom., 30.50
Thermom., Air,
" Sea,
Current,
Drift,
Wind,
" Force, calm
Sea, smooth
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{	Mean Noon, S 5° 9' 39"	{	Var. 1 Hour, 57.63"	Equation of Time, increasing,		{	Var. 1 Hour, 0.724s.	{	Sun's Semi-Diam., 16' 2"	{	Sidereal Time, 12h 59m 55.79s.
						Add to Mean Time, 11m 51.67s.							
						Sub. from Appt. Time, 11 51.52							

This day commences with a dead calm and continues so through out the twenty four hours. This P. M. Mr. Hope put water and was hauled the potatoes. This P. M. employed at odd jobs about dark. Mast heads up from day light until dark. Pumps and lights - all attended. all well.

Lat. by Obs., 35-10
Long. by Obs., 170-05
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 1.20
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.

Barom., 30.10
Thermom., Air,
" Sea,
Current,
Drift,
Wind, none
" Force, calm
Sea, smooth
Weather, good

41st Week.]

TUESDAY, 8th OCTOBER, 1907.

[281-84.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S 5° 32' 40" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, }
 increasing, { Appt. Noon, 5 32 29 } 57' 46" } Add to Mean Time, 12m 8' 55s. } 0' 707s. } 16' 2" } 13h 3m 52' 35s.

This day commences with a strong breeze from the West - Ship on the star board tack under top sails and staysails, steering by the wind first part of day - later part of day steady E.

At one down shipyard down started head S. E.

This A.M. employed in breaking out provisions P.D. was half bush.

Pumps and lights care fully attended to - So ends this day - all well.

Lat. by Obs., 35-26

Long. by Obs., 178-0

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 12°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.

Barom., 30.10

Thermom., Air,

,, Sea,

Current,

Drift,

Wind, West

,, Force, Strong

Sea,

Weather, smooth good

41st Week.]

WEDNESDAY, 9th OCTOBER, 1907.

[282-83.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S 5° 55' 37" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, }
 increasing, { Appt. Noon, 5 55 26 } 57' 23" } Add to Mean Time, 12m 25' 63s. } 0' 690s. } 16' 2" } 13h 7m 48' 90s.

This day commences with a calm - At day light set the topsails. At 8.30 A.M. light breeze from the S. - At 10.00 fresh breeze from the N. E. First part of day steered S. E. X E. latter part of day by the wind, heading N. E. X E. At 4.45 P.M. Captain

raised right whale in the water but did not make it yet as right whale until 5.30 P.M. Made out three right whales seemed to be at anchor as they made a circuit around ship. Shortened sail, on the Port tack heading N. E. X E. -

So ends this day - Pumps and lights care fully attended - all well.

Lat. by Obs., 35-55

Long. by Obs., 179-30

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used,

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.

Barom., 30.10

Thermom., Air,

,, Sea,

Current,

Drift,

Wind, S. E. X E.

,, Force, light

Sea,

Weather, smooth good

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, S 6° 18' 30"	{ Appt. Noon, 6 18 18 }	Var. 1 Hour, 57.08"	Equation of Time, increasing,		Var. 1 Hour, 0.672s.	Sun's Semi-Diam., 16' 3"	Sidereal Time, 13h 11m 45.45s.
					Add to Mean Time, 12m 41.99s.	Sub. from Appt. Time, 12 41.85			

This day commences with a fresh breeze from the N. W. ship on different tacks all day working to the N. W.
First part of day had a fresh breeze - Later part of day had strong breeze with heavy swell. At four down to ship on star board tack, heading N. S. W. under fore and main sails and staysails. Pumps and lights were fully attended - Mast made up from day light until dark - All well.

Lat. by Obs., 35-58
Long. by Obs., 169-06
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 30.00
Thermom., Air,
" Sea,
Current,
Drift,
Wind, N. W.
" Force, Strong
Sea, 3 rough
Weather, good.

NAUT. EPHEMERIS {	Sun's Declination, increasing,	{ Mean Noon, S 6° 41' 18"	{ Appt. Noon, 6 41 5 }	Var. 1 Hour, 56.86"	Equation of Time, increasing,		Var. 1 Hour, 0.654s.	Sun's Semi-Diam., 16' 3"	Sidereal Time, 13h 15m 42.00s.
					Add to Mean Time, 12m 57.91s.	Sub. from Appt. Time, 12 57.77			

This commences with a strong breeze and heavy swell. Ship on different tacks by the wind. Mast made up from day light until dark morning sun. Pumps and lights were fully attended. All well.

Lat. by Obs., 36-06
Long. by Obs., 168-55
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 29.90
Thermom., Air,
" Sea,
Current,
Drift,
Wind, N. W. S.
" Force, Strong
Sea, 3 rough
Weather, good.

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, S 7° 4' 0"	{ Var. 1 Hour, 56° 63"	{ Equation of Time, increasing, Add to Mean Time, 13m 13.38s. Sub. from Appt. Time, 13 13.24 }	{ Var. 1 Hour, 0° 635a.	Sun's Semi-Diam., 16' 3"	Sidereal Time, 13h 19m 38.56a.

This day commences with a strong breeze and squalls. Ship mostly stay under tuck under lower topsails. At 11 a.m. took in fore top sail.

This a.m. saw school of porpoises - P.M. blowing hard and squally. Sign from our ship made in the fore ends this day - pumps and lights carefully attended all well.

Lat. by Obs., 36-20
Long. by Obs., 168-30
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 29.80
Thermom., Air,
" Sea,
Current,
Drift,
Wind, West
" Force, strong
Sea, rough
Weather, squally

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, S 7° 26' 36"	{ Var. 1 Hour, 56° 38"	{ Equation of Time, increasing, Add to Mean Time, 13m 28.38s. Sub. from Appt. Time, 13 28.24 }	{ Var. 1 Hour, 0° 615a.	Sun's Semi-Diam., 16' 4"	Sidereal Time, 13h 23m 35.11s.

This day commences with a fresh breeze from the S.E. Ship on the port tack by the night. Ship under all plain sail heading N.N.W. At 5.30 P.M. more ship made N.E. fore ends this day - mast heads up from day light until dark, pumps and lights carefully attended all well.

300 days out from Fisco.

Lat. by Obs., 35-44
Long. by Obs., 168-35
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 30.10
Thermom., Air,
" Sea,
Current,
Drift,
Wind, West
" Force, fresh
Sea, heavy swell
Weather, good

42nd Week.]

MONDAY, 14th OCTOBER, 1907.

[287-78.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S 7° 49' 6" } Var. 1 Hour, { Equation of Time, increasing, { Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, }
 increasing, { Appt. Noon, 7 48 53 } 56' 11" } Add to Mean Time, 13m 42' 89s. } 0' 594s. } 16' 4" } 13h 27m 31' 60s.

This day commences with a fresh breeze from the N.E. ship on the starboard tack under top sails and courses, heading S. by E. at 1 P.M. our ship headed N. E.

Several fir trees seen today on piece of drift wood. At 4 P.M. from shore to on the starboard tack heading S. by E. ends this day's rumps and lights all attended.

all well
Broke out water 7 P.M.

Lat. by Obs., 35-52
Long. by Obs., 169-04 1/2
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.

Barom., 29.90
Thermom., Air,
" Sea,
Current,
Drift,
Wind, N. by E.
" Force, fresh
Sea, 3
Weather, squally
cloudy

42nd Week.]

TUESDAY, 15th OCTOBER, 1907.

[288-77.]

NAUT. EPHEMERIS { Sun's Declination, { Mean Noon, S 8° 11' 30" } Var. 1 Hour, { Equation of Time, increasing, { Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, }
 increasing, { Appt. Noon, 8 11 17 } 55' 83" } Add to Mean Time, 13m 56' 89s. } 0' 573s. } 16' 4" } 13h 31m 28' 22s.

This day commences with a light breeze, and calms with heavy squalls. continues light squalls through out the day. Ship under easy sail on the port tack all day. Saw employment in picking oakum. Mast heads up from day light until dark. So ends this day all well.

Lat. by Obs., 35-57
Long. by Obs., 169-00
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.

Barom., 30.
Thermom., Air,
" Sea,
Current,
Drift,
Wind, N. by E.
" Force, light
Sea, 3
Weather, squally
good

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, S 8° 33' 46"	Var. 1 Hour, 55° 53"	Equation of Time, increasing,		Var. 1 Hour, 0° 560s.	Sun's Semi-Diam., 16' 4"	Sidereal Time, 13h 35m 24.77s.
				Add to	Mean Time, 14m 10.36s.			
				Sub. from	Appt. Time, 14 10.24			

This day commenced with light breeze and calm - Ship on the starboard tack - At 10 A.M. light breeze sprang from the West. Employed in rigging chumch and

A.M. saw near Right of the lead. P.M. saw several fish tracks on both flanking in the water.

This P.M. threw over board a bath with a pepusin in it.

At 9 P.M. went to on the port tack, heading N.W. by N. So ends this day -

All well. Mast heads up from day light until dark -

Lat. by Obs., 35-53

Long. by Obs., 168-39

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 13°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.,

Barom., 30.10

Thermom., Air,

,, Sea,

Current,

Drift,

Wind, variable

,, Force, light

Sea, smooth

Weather, good.

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, S 8° 55' 55"	Var. 1 Hour, 55° 21"	Equation of Time, increasing,		Var. 1 Hour, 0° 527s.	Sun's Semi-Diam., 16' 5"	Sidereal Time, 13h 39m 21.32s.
				Add to	Mean Time, 14m 23.30s.			
				Sub. from	Appt. Time, 14 23.17			

This day commenced with a fresh breeze from the S.E. This A.M. ship steering different course to the West and North - This P.M. on the starboard tack, by the wind heading East.

This P.M. pushed back 5.30 now ship headed S.W. down down shortened sail for the night.

All well this day - Mast heads up from day light until dark - Mumps and lights are fully attended - all well

Lat. by Obs., 35-30

Long. by Obs., 169-04

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 13°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.,

Barom., 30.20

Thermom., Air,

,, Sea,

Current,

Drift,

Wind, S.E.

,, Force, fresh

Sea, smooth

Weather, good.

NAUT. EPHEMERIS, {	{ Sun's Declination, increasing,	{ Mean Noon, S 9° 17' 56" } { Appt. Noon, 9 17 43 }	{ Var. 1 Hour, 54' 88" }	Equation of Time, increasing,		{ Var. 1 Hour, 0' 503s. }	Sun's Semi-Diam., 16' 5"	Sidereal Time, 13h 43m 17' 88s.
				Add to	Mean Time, 14m 35' 67s.			

This day had a fresh breeze from the S. & E. Ship on report back got clear. Had lying S. It. This A. M. employed in picking over "yams" - good other odd job about deck. This A. M. repairing galley stove, scraped and changed the same. 5:30 P. M. passed school of black fish - turned three boats and got two - got them on board ship at 5 P. M. set the net - put in sail ship on port back for the night. So ends this day - all well.

Lat. by Obs., 35-41
Long. by Obs., 170-10
Course by Obs.,
Distance by Obs.,
,, by Log,
Var. used, 12'
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.,

Barom., 30.30
Thermom., Air,
,, Sea,
Current,
Drift,
Wind, S. & E.
,, Force, fresh
Sea, smooth
Weather, good

NAUT. EPHEMERIS {	{ Sun's Declination, increasing,	{ Mean Noon, S 9° 39' 50" } { Appt. Noon, 9 39 36 }	{ Var. 1 Hour, 54' 54" }	Equation of Time, <i>increasing</i> ,		{ Var. 1 Hour, 0' 479s. }	Sun's Semi-Diam., 16' 5"	Sidereal Time, 13h 47m 14' 43s.
				Add to	Mean Time, 14m 47' 45s.			

This day commenced with a light breeze from the S. ship on different tacks all day - no sulphur bottom in sight. So ends this day all well.

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
,, by Log,
Var. used, 12'
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.,

Barom., 30.30
Thermom., Air,
,, Sea,
Current,
Drift,
Wind, S.
,, Force, light
Sea, smooth
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, S10° 1' 34"	Var. 1 Hour, 54' 18"	Equation of Time, increasing,		Var. 1 Hour, 0' 453a.	Sun's Semi-Diam., 16' 6"	Sidereal Time, 13h 51m 10.98s.
				Add to Mean Time, 14m 58.63s.	Sub. from Appt. Time, 14 58.52 }			

This day commenced with a fresh breeze from the S. ship on the starboard tack all day. One gill huck seen. So ends this day. All well.

Lat. by Obs., 33-40
Long. by Obs., 170-36
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 120
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 30.20
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S. by E.
" Force, light
Sea, smooth
Weather, good.

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, S10° 23' 10"	Var. 1 Hour, 53' 50"	Equation of Time, increasing,		Var. 1 Hour, 0' 426a.	Sun's Semi-Diam., 16' 6"	Sidereal Time, 13h 55m 7.54s.
				Add to Mean Time, 15m 9.18s.	Sub. from Appt. Time, 15 9.07 }			

This day commenced with a fresh breeze from the S. ship on the starboard tack at 7.30 A.M. started for try sock to try out "black fish". ~~Station~~ fishes had at noon at 12. From Rayson Gaud's raised right whale lower at 1.30 P.M. three boats put boy boat struck 2.45 P.M. took the whale to ship at 6 P.M. furl'd sails and set for watch. So ends this day all well. Thank God for all small favors.

School black fish around ship at sun down.

Lat. by Obs., 36-21
Long. by Obs., 170-17
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 120
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 30.10
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S. by E.
" Force, fresh
Sea, smooth
Weather, good.

Light in harbor.

NAUT. EPHEMERIS, {	Sun's Declination, <i>increasing,</i>	{ Mean Noon, S10° 44' 37" }	{ Var. 1 Hour, Appt. Noon, 10 44 23 }	{ 53' 41" }	Equation of Time, <i>increasing,</i>		{ Var. 1 Hour,	Sun's Semi-Diam., 16' 6"	Sidereal Time, 13h 59m 4' 09s.
					Add to	Mean Time, 15m 19' 03s.			

This day commenced with a light breeze from N.E. ship on the starboard tack. At 11.30 A.M. called all hands got coffee, at 3 P.M. started cutting in fresh finished at 10 A.M. split the line and stored it away. Lashed up the cutting gear and made sail, two schools of black fish seen today or one school seen twice - got some down sported sail on the starboard tack heading S.E.

So ends this day
All well.

Lat. by Obs., 36. 15-
Long. by Obs., 170-00
Course by Obs.,
Distance by Obs.,
,, by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths,

Barom., 30.20
Thermom., Air,
,, Sea,
Current,
Drift,
Wind, Light
,, Force, light
Sea, smooth
Weather, good.

NAUT. EPHEMERIS, {	Sun's Declination,	{ Mean Noon, S11° 5' 54"	Var. 1 Hour, 53' 00"	Equation of Time, increasing,		Var. 1 Hour, 0' 37 1/2s.	Sun's Semi-Diam., 16' 8"	Sidereal Time, 14h 3m 0' 64s.
	increasing,	{ Appt. Noon, 11 5 40		Add to Mean Time, 15m 28' 32s.				
				Sub. from Appt. Time, 15 28' 22				

This day commenced with a fresh breeze from the N.E. ship on the starboard tack all day. Employed in cutting up the breaking out the lead for stowing oil. At 6 P.M. started the try works in the water. plenty of life seen in the water.
So ends this day all well.

Lat. by Obs., 36. 32
Long. by Obs., 170-06
Course by Obs.,
Distance by Obs.,
,, by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths,

Barom., 30.10
Thermom., Air,
,, Sea,
Current,
Drift,
Wind, N.E.
,, Force, strong
Sea, choppy
Weather, good

43rd Week.]

THURSDAY, 24th OCTOBER, 1907.

[297-68.]

NAUT. EPHEMERIS,	Sun's Declination, <i>increasing,</i>	{ Mean Noon, $81^{\circ} 27' 1''$ Appt. Noon, $11 26 47$ }	Var. 1 Hour, $52 58''$	Equation of Time, <i>increasing.</i>		Var. 1 Hour, $0.342s.$	Sun's Semi-Diam., $16' 7''$	Sidereal Time, $14h 6m 57.20s.$
				Add to Mean Time, $15m 36' 37s.$				
				Sub. from Appt. Time. $15 36.78$				

This day commences with
fresh gale of wind from the N. E. St.
ship on the Port tack under
long main, topsail, and storm
staysails.

Employed in baling oil. At
10.30 A.M. school down in account
of bad weather and rain. At 11.45 A.M.
wind hauled to S. E. heavy rain
squall - wind moderated, and
cleared up.

1.30 P.M. started try work
again. Sailed this day - one fire
hulk seen -
All well.

Lat. by Obs.,

Long. by Obs.,

Course by Obs.,

Distance by Obs.,

" by Log,

Var. used, 12°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.,

Barom., 29.85

Thermom., Air,

" Sea,

Current,

Drift,

Wind, Variable

" Force, light

Sea, ruffled

Weather, clearing

43rd Week.]

FRIDAY, 25th OCTOBER, 1907.

[298-67.]

NAUT. EPHEMERIS,	{ Sun's Declination, increasing,	{ Mean Noon, $81^{\circ} 47' 58''$ Appt. Noon, $11^{\circ} 47' 44''$ }	Var. 1 Hour, $52' 14''$	Equation of Time, increasing,		Var. 1 Hour, $0' 31.3s.$	Sun's Semi-Diam., $16' 7''$	Sidereal Time, $14h 10m 53.75s.$
				Add to Mean Time, $15m 44' 72s.$				
				Sub. from Appt. Time, $15^m 44' 64s.$				

This day commences with
a fresh breeze from the East.

Employed in baling oil and
stopping down ship on the Port
tack until 2. P.M. heading N. E. X
2. P.M. wore ship - finished
tripping out at noon - cleared up.

The decks and was bed off.
P.M. school of black fish
around ship - two fire hawks,
plenty of birds also.

Sailed this day -
Pumps and light all
attended -
All well.

Lat. by Obs., 36.50 Long. by Obs., 169.30

Course by Obs.,

Distance by Obs.,

" by Log,

Var. used, 12°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.,

Barom., 30.10

Thermom., Air,

" Sea,

Current,

Drift,

Wind, fresh

" Force, fresh

Sea, smooth

Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, 812° 8' 44"	Var. 1 Hour, 51' 69"	Equation of Time, increasing, {	Add to Mean Time, 15m 51' 85s.	Var. 1 Hour, 0' 232s.	Sun's Semi-Diam., 16' 7"	Sidereal Time, 14h 14m 50' 30s.
	increasing,	{ Appt. Noon, 12 8 30 }			Sub. from Appt. Time, 15 51' 78			

This day commences with a strong breeze and heavy swell, ship on the port tack all day. This A. M. employed at old job, about deck, firing the head of gas. M. stored down 1206 gallons of oil in fore hold. For the part of day had heavy squalls. Ship under lower topsails & ends this day all well.

Lat. by Obs., 36.08

Long. by Obs., 169.47

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 12°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10th.,

Barom., 30.30

Thermom., Air,

,, Sea,

Current,

Drift,

Wind, S. by E.

,, Force, Strong

Sea, rough

Weather, bad

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, 812° 29' 19"	Var. 1 Hour, 51' 22"	Equation of Time, increasing, {	Add to Mean Time, 15m 58' 25s.	Var. 1 Hour, 0' 251s.	Sun's Semi-Diam., 16' 7"	Sidereal Time, 14h 18m 46' 30s.
	increasing,	{ Appt. Noon, 12 29 5 }			Sub. from Appt. Time, 15 58' 18			

This day commences with a calm. A. M. 8.45; light breeze from the west, made sail and stood on starboard tack, heading S. by E. P. M. light air. P. M. raised fore and main black fish and fair tacks, and plenty of bird. At even down shortened sail, on the starboard tack. All well.

Lat. by Obs., 36.10

Long. by Obs., 169.40

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 12°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10th.,

Barom., 30.40

Thermom., Air,

,, Sea,

Current,

Drift,

Wind, light

,, Force, light

Sea, smooth

Weather, good

NAUT. EPHEMERIS,	Sun's Declination, increasing,	{ Mean Noon, S12° 49' 42" } { Appt. Noon, 12 49 29 }	Var. 1 Hour, 50.73"	Equation of Time, increasing.		Var. 1 Hour, 0.220s.	Sun's Semi-Diam., 16' 8"	Sidereal Time, 14h 22m 43.41s.
				Add to	Mean Time, 16m 3.90s.			
				Sub. from	Appt. Time, 16 3.84			

This day commenced with
a light breeze from the S. S. It
At day light ship on the port
tack.
11. A. M. now ship heading
Emp. byed in fra king out
provisions and stowing out.
Few fish taken except
So ends this day -
Pump etc, all attended
all mill.

Lat. by Obs., 36.12
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12.0
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.

Barom., 30.20

Thermom., Air,

" Sea,

Current,

Drift,

Wind, S. S. It

" Force, light

Sea, smooth

Weather, good

NAUT. EPHEMERIS,	Sun's Declination, increasing,	{ Mean Noon, S13° 9' 54" } { Appt. Noon, 13 9 41 }	Var. 1 Hour, 50.23"	Equation of Time, increasing.		Var. 1 Hour, 0.188s.	Sun's Semi-Diam., 16' 8"	Sidereal Time, 14h 26m 39.97s.
				Add to	Mean Time, 16m 8.73s.			
				Sub. from	Appt. Time, 16 8.73			

This day had fresh breeze
from the S. S. It
A. M. ship on port tack by
the wind heading S. S. It x S. S. It
At noon steered port.
3. P. M. steered S. S. It.
At sun down started sail
on starboard tack heading East.
Emp. byed in repairing the
sail.
Patch of red feed seen this
P. M.
So ends this day -
all mill.

Lat. by Obs., 36.05
Long. by Obs., 170.59
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12.0
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.

Barom., 30.50

Thermom., Air,

" Sea,

Current,

Drift,

Wind, S. fresh

" Force, fresh

Sea, smooth

Weather, good

44th Week.]

WEDNESDAY, 30th OCTOBER, 1907.

[303-62.]

NAUT. EPHEMERIS,	Sun's Declination, increasing,	{ Mean Noon, S13° 29' 53" } Appt. Noon, 13 29 40 }	Var. 1 Hour, 49° 71"	Equation of Time, increasing,		Var. 1 Hour, 0° 155s.	Sun's Semi-Diam., 16' 8"	Sidereal Time, 14h 30m 36° 52s.
				Add to	Mean Time, 16m 12° 89s.			
				Sub. from	Appt. Time, 16 12° 85			

This day had light breeze all day. At day light ship on port tack under all sails and full sail.

7.30 A.M. made all sail steered N. x E. 10.30 Luffed to the wind on starboard tack heading E. N. E.

Emp. boyed making out

3.30 P.M. was h'd. d'ck -
Luff down, gave ship shakedown -
headed S. W.
So ends this day - All well.

Lat. by Obs., 35-38

Long. by Obs., 170-11

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 12°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10th.

Barom., 30.60

Thermom., Air,

,, Sea,

Current,

Drift,

Wind, S. S. E.

,, Force, light

Sea, smooth

Weather, good

44th Week.]

THURSDAY, 31st OCTOBER, 1907.

[304-61.]

NAUT. EPHEMERIS,	Sun's Declination, increasing,	{ Mean Noon, S13° 49' 40" } Appt. Noon, 13 49 27 }	Var. 1 Hour, 49° 17"	Equation of Time, increasing,		Var. 1 Hour, 0° 122s.	Sun's Semi-Diam., 16' 8"	Sidereal Time, 14h 34m 33° 07s.
				Add to	Mean Time, 16m 16° 22s.			
				Sub. from	Appt. Time, 16 16° 18			

This day had light variable breeze - Ship on the port tack under all sail, heading from S. to S. E.

Emp. boyed in fixing rigging sail - At 6 P.M. Steered S. S. E.

at 11.30 Jm Borgia passed right whistles - Observed three boats gave chase - my light air whistles appeared & took at home.

Came on board at 7.30. Shortened sail. went sit matches.
So ends this day -
All well.

Lat. by Obs., 36-00

Long. by Obs., 170-11

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 12°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10th.

Barom., 30.50

Thermom., Air,

,, Sea,

Current,

Drift,

Wind, Variable

,, Force, light

Sea, smooth

Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, S14° 0' 13" } { Appt. Noon, 14 9 0 }	Var. 1 Hour, 48' 62"	Equation of Time, increasing,		Var. 1 Hour, 0-089a.	Sun's Semi-Diam., 16' 9"	Sidereal Time, 14h 33m 29-63a.
				Add to	Mean Time, 16m 18-75a.			

Thursday had light wind from the N.E. Ship on different tracks - steering different courses under all sail. Weather very hot patches of feed and saltacor. At sun down shortened sail for the night -
So ends this day - all well.

Lat. by Obs., 36-08
Long. by Obs., 170-02
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.40
Thermom., Air,
" Sea,
Current,
Drift,
Wind, Kazeath
" Force, light
Sea, smooth
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, S14° 28' 33" } { Appt. Noon, 14 28 20 }	Var. 1 Hour, 48' 05"	Equation of Time, increasing,		Var. 1 Hour, 0-055a.	Sun's Semi-Diam., 16' 9"	Sidereal Time, 14h 42m 26-18a.
				Add to	Mean Time, 16m 20-47a.			

This day had light air and calm - wind from N.E. through night the 24 hours. Ship laying around, only drifting - Employed this A.M. in setting up - Grouse yard. In P.M. washed deck 10 feet back seen - plenty of saltacor seen. At sun down shortened sail for the night, with four yards square. So ends this day. Pumps and etc all attended -
all well.

Lat. by Obs., 36.16
Long. by Obs., 170-03 1/4
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.40
Thermom., Air,
" Sea,
Current,
Drift,
Wind, Kazeath
" Force, light
Sea, smooth
Weather, good

45th Week.]

SUNDAY, 3rd NOVEMBER, 1907. (23rd Sunday after Trinity.)

[307-58.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, $S14^{\circ} 47' 40''$ } Var. 1 Hour, { Equation of Time, *increasing*, } Var. 1 Hour, Sun's Semi-Diam., Sidereal Time,
increasing, { Appt. Noon, $14^{\circ} 47' 27''$ } $47' 46''$ Add to Mean Time, $16m 21' 38s.$ } $0' 021s.$ $16' 9''$ $14h 46m 22' 74s.$
 Sub. from Appt. Time, $16^{\circ} 21' 37''$

This day commences with
 light variable winds ship on
 different tacks reaching all ways
 for storage way.
 So ends this day -
 All well.

Lat. by Obs., 36.15
 Long. by Obs., 170.10
 Course by Obs.,
 Distance by Obs.,
 „ by Log, 12^0
 Var. used,
 Dev. used,

Steaming Time, h. m.,
 Average Speed, knots roths.,

Barom., 30.40
 Thermom., Air,
 „ Sea,
 Current,
 Drift,
 Wind, Variable
 „ Force, light
 Sea, smooth
 Weather, good.

45th Week.]

MONDAY, 4th NOVEMBER, 1907.

[308-57.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, $S15^{\circ} 6' 31''$ } Var. 1 Hour, { Equation of Time, *increasing*, } Var. 1 Hour, Sun's Semi-Diam., Sidereal Time,
increasing, { Appt. Noon, $15^{\circ} 6' 19''$ } $46' 36''$ Add to Mean Time, $16m 21' 47s.$ } $0' 013s.$ $16' 9''$ $14h 50m 19' 29s.$
 Sub. from Appt. Time, $16^{\circ} 21' 47''$

This day had light air as
 breeze which increased to a light
 breeze ship steering different courses
 on different tacks.
 This A.M. saw plenty of
 feed, fish, and fish tracks.
 P.M. saw the same.
 Saw down shortened sail
 for this night heading E. N. E.
 Pumps etc etc carefully
 attended.
 All well.

Lat. by Obs., 36.02
 Long. by Obs., 170.20
 Course by Obs.,
 Distance by Obs.,
 „ by Log, 12^0
 Var. used,
 Dev. used,

Steaming Time, h. m.,
 Average Speed, knots roths.,

Barom., 30.40
 Thermom., Air,
 „ Sea,
 Current,
 Drift,
 Wind, S. L. E.
 „ Force, fresh
 Sea, smooth
 Weather, good.

NAUT. EPHEMERIS, {	Sun's Declination, <i>increasing,</i>	{ Mean Noon, 815° 25' 8" Appt. Noon, 15 24 56 }	{ Var. 1 Hour, 46° 23' }	Equation of Time, <i>decreasing,</i>		{ Var. 1 Hour, 0° 047s. }	Sun's Semi-Diam., 16' 10"	Sidereal 1 14h 54m 15s.
				Add to	Mean Time, 16m 20' 74s.			

This day had fresh breeze from the east. - At day light made sail ship on different tracks during the day. - A. M. saw some feed and fire tracks. P. M. passed a boat let on side up, found or looked like a small yawl seen in the water a long time. - A. M. down short land sail on the port tack heading S & E. - So ends this day - Pump etc all attended all well.

Lat. by Obs., 36-00
Long. by Obs., 170-22
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.50
Thermom., Air,
" Sea,
Current,
Drift,
Wind, East
" Force, fresh
Sea, fresh
Weather, mixed
good

NAUT. EPHEMERIS,	Sun's Declination, <i>increasing,</i>	{ Mean Noon, 815° 43' 30" } Appt. Noon, 15 43 18 }	Var. 1 Hour, 45° 59"	Equation of Time, <i>decreasing,</i>		{ Var. 1 Hour, 0° 08' 2s. }	Sun's Semi-Diam., 16' 10"	Sidereal Time, 14h 58m 12' 40s.
				Add to	Mean Time, 16m 19' 18s.			

This day commenced with a fresh breeze from the East. At day light made sail ship on port tack heading S & E. - A. M. saw some feed and fire tracks. P. M. passed a boat let on side up, found or looked like a small yawl seen in the water a long time. - A. M. down short land sail on the port tack heading S & E. - So ends this day - Pump etc all attended all well.

Lat. by Obs., 36.53-
Long. by Obs., 170-43
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.50
Thermom., Air,
" Sea,
Current,
Drift,
Wind, East
" Force, fresh
Sea, smooth
Weather, good

45th Week.]

THURSDAY, 7th NOVEMBER, 1907.

[311-54.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S16° 1' 36" } Var. 1 Hour, { Equation of Time, decreasing, { Add to Mean Time, 16m 16.80s. } Var. 1 Hour, { Sun's Semi-Diam., 16' 10" } Sidereal Time, 15h 2m 8.96s.

Add to Mean Time, 16m 16.80s. Sub. from Appt. Time, 16 16.83

Var. 1 Hour, 0.116s.

Sun's Semi-Diam., 16' 10"

Sidereal Time, 15h 2m 8.96s.

This day had light E S E winds
 all day. A. M. day high ship on
 shore board took heading
 N. E. Made full sail at
 day light. A. M. party of five
 taken in sight. Weather full
 of feed - At 9.20 A. M. Mr.
 Martin raised 3 right whales right
 ahead 10.30 found 3 bats - 11.30 mate
 struck once after 2nd mate struck another
 whale. Landed 4th mate paid
 by struck another whale, killed
 the 3 got them along side at 6.30 P.M.
 furlled all sail & "Spring Main Tack"
 all hands had supper & set
 watch for the night. It
 ends this day.
 All well and
 happy - "Thank God."

Lat. by Obs., 36-48

Long. by Obs., 170-48

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 12°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.,

Barom., 30.3 d

Thermom., Air,

,, Sea,

Current,

Drift,

Wind, E. S. E.

,, Force, light

Sea, smooth

Weather, good.

45th Week.]

FRIDAY, 8th NOVEMBER, 1907.

[312-53.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S16° 19' 26" } Var. 1 Hour, { Equation of Time, decreasing, { Add to Mean Time, 16m 18.59s. } Var. 1 Hour, { Sun's Semi-Diam., 16' 10" } Sidereal Time, 15h 6m 5.61s.

Add to Mean Time, 16m 18.59s. Sub. from Appt. Time, 16 13.63

Var. 1 Hour, 0.151s.

Sun's Semi-Diam., 16' 10"

Sidereal Time, 15h 6m 5.61s.

This day had light E. S. E. wind
 later part calms - Ship hog too
 cutting in - Landed all hands at
 4. A. M. had coffee and commenced
 cutting in - finished cutting at 4.10
 P. M. chased two heads and
 threw the scalps over board
 Whale that (Waste bat got) Mr. Martin
 had an iron in him - seen there for
 a long time - prompt looking to the
 (Bash Aliu) - The last blow of her
 she was whaling in the early fifties
 had supper all hands &
 set the watch for the night
 All well.

Lat. by Obs., 36-39

Long. by Obs., 170-50

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 12°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths.,

Barom., 30.30

Thermom., Air,

,, Sea,

Current,

Drift,

Wind, E. S. E.

,, Force, light

Sea, smooth

Weather, good.

NAUT. EPHEMERIS, {	{ Sun's Declination, increasing,	{ Mean Noon, 816° 37' 0" } { Appt. Noon, 16 36 48 }	{ Var. 1 Hour, 43' 56" }	Equation of Time, decreasing,		{ Var. 1 Hour, 0' 18.5s. }	Sun's Semi-Diam., 16' 11"	Sidereal Time, 15h 10m 2.07s.
				Add to	Mean Time, 16m 9.55s.			

This day commences with a
grad. flat calms - and continues so
throughout the twenty four hours.
Ship laying anchored under
short sail, trying out - filled three
heads of honey and duck - Employed
suet water, mix stove oil in place of
it. Bluffer making oil fast.

P.M. - Thick fog see w. rights
whale, also fin back, and plenty of
black fish. Three carker or three
corps seen this day - That one
left for yesterday.

P.M. - all doing well
all well.

Lat. by Obs., 36-39

Long. by Obs., 29-48

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 12°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots roths.,

Barom., 29.25

Thermom., Air,

,, Sea,

Current,

Drift,

Wind, calm

,, Force, calm

Sea, smooth

Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, <i>increasing,</i>	{ Mean Noon, 816° 54' 16" Appt. Noon, 16 54 5 }	{ Var. 1 Hour, 42' 84" }	Equation of Time, <i>decreasing,</i>		{ Var. 1 Hour, 0' 22.0s. }	Sun's Semi-Diam., 16' 11"	Sidereal Time, 15h 13m 58.62s.
				Add to	Mean Time, 16m 4.68s.			

This day commences with
a light breeze from the N. E. Ship
on starboard tack all day -
under short sail "try out oil"
Employed in trying out
and stowing down - stored
down 1160 gallons -
Navy fin back - and birds
seen today - so ends this day
all well.

Lat. by Obs., 36-39

Long. by Obs.,

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 12°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots roths.,

Barom., 30.10

Thermom., Air,

,, Sea,

Current,

Drift,

Wind, N. E. light

,, Force, light

Sea, smooth

Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, <i>increasing,</i>	{ Mean Noon, S17° 11' 16" } Appt. Noon, 17 11 5	{ Var. 1 Hour, 42' 11" }	Equation of Time, <i>decreasing,</i>		{ Var. 1 Hour, 0.254s.	Sun's Semi-Diam., 16' 11"	Sidereal Time, 15h 17m 55.18s.
				Add to	Mean Time, 15m 58.98s.			

This day commenced with
a strong breeze from the N. Ship
my stay board stack, under
short sail, trying to
Employed in baling oil and
storing down -
Stowed down and lugged
up 2090 gals of oil
Sundays this day -
all well.

Lat. by Obs., 36-57
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 29.90
Thermom., Air,
" Sea,
Current,
Drift,
Wind,
" Force, strong
Sea, rough
Weather, cloudy

NAUT. EPHEMERIS {	{ Sun's Declination, increasing,	{ Mean Noon, S17° 27' 57" } Appt. Noon, 17 27 46 }	{ Var. 1 Hour, 41' 36" }	Equation of Time, decreasing,		{ Var. 1 Hour, 0' 28.9s. }	Sun's Semi-Diam., 16' 11"	Sidereal Time 15h 21m 51.74s.
				Add to	Mean Time, 15m 52.45s.			

This day commenced with
strong breeze from the N. Ship
under stunsail trying to
budge and false part of
day had light breeze with heavy
swell. Employed in baling oil
finished baling at 1. P. M. More
ship - set topsails and jib,
heading N. E.
Hatched deck, cleared away
things up -
Sundays this day -
all well.

Lat. by Obs., 37-12
Long. by Obs., 171-59
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 13°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 29.60
Thermom., Air,
" Sea,
Current,
Drift,
Wind, light
" Force, light
Sea, rough
Weather, cloudy

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{	Mean Noon, 817° 44' 21"	{	Var. 1 Hour, 40' 00"	{	Equation of Time, decreasing, Add to Mean Time, 15m 45' 00s. Sub. from Appt. Time, 15 45' 18"	{	Var. 1 Hour, 0' 32s.	{	Sun's Semi-Diam., 16' 11"	{	Sidereal Time, 15h 25m 48' 29s.

This day commenced with a strong breeze from the S.W. Ship steering N. E. under short sail the first part of day - Middle and late part time to go the starboard tack, heading S. S. E. Employed in stowing down oil stored, about 2222 gallons - Two fine birds - two dead whale bodies seen plenty of birds
So ends this day -
All right.

Lat. by Obs., 36-33-
Long. by Obs., 170-53-
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,
Steaming Time, h. m.,
Average Speed, knots faths.,

Barom., 29.90
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S. St.
" Force, Strong
Sea, rough
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{	Mean Noon, 818° 0' 26"	{	Var. 1 Hour, 39' 32"	{	Equation of Time, decreasing, Add to Mean Time, 15m 36' 91s. Sub. from Appt. Time, 15 37' 00"	{	Var. 1 Hour, 0' 35s.	{	Sun's Semi-Diam., 16' 12"	{	Sidereal Time, 15h 29m 44' 85s.

This day commenced with a strong breeze from the S. St. Ship under short topsails - At 7.00 m. steered N. x E. At noon hove to - on starboard tack under four main topsails and storm staysails layed. There was much of this day so ends this day
Camps etc, all attended

Lat. by Obs., 36-19
Long. by Obs., 170-50
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,
Steaming Time, h. m.,
Average Speed, knots faths.,

Barom., 29.90
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S. St.
" Force, Strong
Sea, rough
Weather, good

46th Week.]

FRIDAY, 15th NOVEMBER, 1907.

[319-46.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, $S18^{\circ} 16' 11''$ } Var. 1 Hour, { Equation of Time, decreasing, { Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, }
 increasing, { Appt. Noon, 18 16 1 } 39-02" Add to Mean Time, 15m 27-89s. } 0-393s. 16' 12" 15h 38m 41-40s.

Today had fresh breeze from the S. E. ship on starboard tack. At 7.30 A.M. our ship heading S. E. & S. This A.M. employed in splitting and scrap- ing bone. P.M. light breeze - at 2.30 P.M. Michael M. Harroll raised right whale lowered 3 frags - Harbord boat struck back whale to ship at 5.30 - furled all sail. All hands had supper - Set watches for the night. 5 whales seen this P.M. So ends this day - all well.

Lat. by Obs., $36-17$
 Long. by Obs., $170-04$
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, 12°
 Dev. used,

Steaming Time, h. m.,
 Average Speed, knots faths.

Barom., 30.30
 Thermom., Air,
 „ Sea,
 Current,
 Drift,
 Wind, S. S. E.
 „ Force, light
 Sea, $\odot$ ruffled
 Weather, good.

46th Week.]

SATURDAY, 16th NOVEMBER, 1907.

[320-45.]

NAUT. EPHEMERIS { Sun's Declination, { Mean Noon, $S18^{\circ} 31' 38''$ } Var. 1 Hour, { Equation of Time, decreasing, { Var. 1 Hour, { Sun's Semi-Diam., { Sidereal Time, }
 increasing, { Appt. Noon, 18 31 28 } 38-21" Add to Mean Time, 15m 18-05s. } 0-427s. 16' 12" 15h 37m 37-96s.

Today had light air from the S. E. Ship under short sail this A.M. - Called all hands at 4. A.M. had coffee and started to cut in whale - Blew me out of back had to curl down, plugged it up while repairing hole in the head and left lips on than hit piece finished cutting at 10. A.M. Took bone out of the head & put scalp over board - Split the bone up and sent the watch to dinner at 11.30. Commenced triking at 12.30. Set some sail, and stood on the S. E. tack. So ends this day. All well. Killed a mess of chickens for all hands.

Lat. by Obs., $36-05$
 Long. by Obs., $170-01$
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, 12°
 Dev. used,

Steaming Time, h. m.,
 Average Speed, knots faths.

Barom., 30.40
 Thermom., Air,
 „ Sea,
 Current,
 Drift,
 Wind, S. E.
 „ Force, light
 Sea, $\odot$ ruffled
 Weather, good.

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S18° 46' 45" } Var. 1 Hour, {

Equation of Time, decreasing, { Add to Mean Time, 15m 7.37s. } Var. 1 Hour, { Sub. from Appt. Time, 15 7.49 }

Sun's Semi-Diam., 16' 12"

Sidereal Time, 15h 41m 34.51s.

This day commenced with a light breeze from the S. S. ship on starboard tack, under easy sail all day. Employed in boiling oil and straining down. At P. M. raised whals on the sea - coming to the mid and quickly turned 3 boats, from the fish tank - Called boats back finished boats at 5.30 - Abacns and hulis seen today - So ends the day - all well.

Lat. by Obs., 36-16
Long. by Obs., 169-47
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 13°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 30.50
Thermom., Air,
" Sea,
Current,
Drift,
Wind, N. S. S.
" Force, light
Sea, smooth
Weather, good.

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S19° 1' 32" } Var. 1 Hour, {

Equation of Time, decreasing, { Add to Mean Time, 14m 55.87s. } Var. 1 Hour, { Sub. from Appt. Time, 14 55.99 }

Sun's Semi-Diam., 16' 13"

Sidereal Time, 15h 45m 31.07s.

This day commenced with a fresh breeze from the S. S. ship on starboard tack, leading S. S. S. under topsails and fore sails. This A. M. employed in heating out the stow oil. At 9. A. M. Michael Carroll raised two right whals on the sea - 10. A. M. lowered 3 boats. One boat that struck some drew. One boat that struck some whale iron drew. Last boat that struck again whale run and jacked, sing circling finally killed him. And whale held for a while, tried to haul him up with boats could not do it. We then slip up to his spale - run line to ship here the whale up with the Dmkey got him made fast at 6. P. M. Gashed sail. all hands had supper - Lt. watch for the night. All well, every body worked hard did

Lat. by Obs., 36-28
Long. by Obs., 170-14
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 30.45
Thermom., Air,
" Sea,
Current,
Drift,
Wind, N. N. S.
" Force, fresh
Sea, smooth
Weather, good.

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, S19° 15' 58"	Var. 1 Hour, 35' 68"	Equation of Time, decreasing, {	Add to Mean Time, 14m 43' 54s.	Var. 1 Hour, 0' 531s.	Sun's Semi-Diam., 16' 13"	Sidereal Time, 15h 49m 27' 63s.
	increasing,	{ Appt. Noon, 19 15 49 }			Sub. from Appt. Time, 14 43' 67			

This day commences with a light drizzly rain and fog. Called all hands at 4 A.M. started cutting at 4.30. finished cutting in at 10 A.M. Took bone out of head and threw scarp over board. Stirred down 2185 gallons of oil. Copper cup boiled in getting up coals - started dry marks at 4 P.M. Ship now put back heading to the north. Plenty of fine birds seen today. He ends this day all well.

Lat. by Obs.,
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 30.40
Thermom., Air,
" Sea,
Current,
Drift,
Wind, Variable
" Force, light
Sea, smooth
Weather, cloudy

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, S19° 30' 4"	Var. 1 Hour, 34' 80"	Equation of Time, decreasing, {	Add to Mean Time, 14m 30' 38s.	Var. 1 Hour, 0' 565s.	Sun's Semi-Diam., 16' 13"	Sidereal Time, 15h 53m 24' 18s.
	increasing,	{ Appt. Noon, 19 29 55 }			Sub. from Appt. Time, 14 30' 51			

This day had fresh breeze from the West. Ship in the port tack under easy sail. 9 A.M. more ship. At noon heavy rain squall wind howled to S.S.W. Sun down wind about light and pleasant weather - Employed this day in fishing oil, and storing down. 10 A.M. J. Hamilton cut his leg in right foot in the storeroom found it up and as best he could. This P.M. large quantities of feed seen - passed a whale carcass. He ends this day - All well. Pumps and etc. all attended

Lat. by Obs., 36-42
Long. by Obs., 169-39
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 30.30
Thermom., Air,
" Sea,
Current,
Drift,
Wind, Variable
" Force, fresh
Sea, choppy
Weather, squally

NAUT. EPHEMERIS,	{	Sun's Declination, <i>increasing,</i>	{	Mean Noon, 819° 43' 48"	{	Var. 1 Hour, 33° 22'	{	Equation of Time, <i>decreasing,</i>		{	Var. 1 Hour, 0° 59s.	{	Sun's Semi-Diam., 16' 13"	{	Sidereal Time, 15h 57m 20.74s.
								Add to Mean Time, 14m 16.40s.							
								Sub. from Appt. Time, 14 16.54							

This day commenced with a
fresh breeze from the S. by S. Ship on
the port tack by the wind, under
easy sail
Employed in stowing down oil
and shifting water making room
for water, stowed down 23 1/2 gallons
of oil
One or two fir backs seen to-
day and plenty of sticks
so ends this day - all well.

Lat. by Obs., 36-32
Long. by Obs., 170-00 1/4
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 30.40
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S. by S.
" Force, fresh
Sea, smooth
Weather, good.

NAUT. EPHEMERIS,	{	Sun's Declination, <i>increasing,</i>	{	Mean Noon, 819° 57' 11"	{	Var. 1 Hour, 33° 01'	{	Equation of Time, <i>decreasing,</i>		{	Var. 1 Hour, 0° 53s.	{	Sun's Semi-Diam., 16' 13"	{	Sidereal Time, 16h 1m 17° 30s.
								Add to Mean Time, 14m 1° 61s.							
								Sub. from Appt. Time, 14 1° 76							

This day had light breeze
from the S. by S. - Ship on port tack
under easy sail
7.30 A.M. men ship and
made sail
Later part of day mild S. by S.
A.M. men ship back, cleaned
up.
Mr. Martin (2nd mate) put
new wire in his tubes - all hand
employed in mending clothes.
One fir back seen today
at very down started sail
for the night
No birds this day -
F. Hamilton still off duty
with cut foot, but improving -
all well.
Phas God on mail get a
right school on the morrow

Lat. by Obs., 36-18
Long. by Obs., 170-05
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 30.40
Thermom., Air,
" Sea,
Current,
Drift,
Wind, variable
" Force, light
Sea, heavy swell
Weather, good.

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{	Mean Noon, S20° 10' 12"	{	Appt. Noon, 20 10 5	{	Var. 1 Hour, 32'10"	{	Equation of Time, decreasing, Add to Mean Time, 13m 46'01s. Sub. from Appt. Time, 13 46'16	{	Var. 1 Hour, 0'667s.	{	Sun's Semi-Diam., 16' 14"	{	Sidereal Time, 16h 5m 13'85s.

This day commenced with a
fresh breeze from the West. Ship on the
starboard tack - 7.30. A 14 steered
E.S.E. At 8.30 raised a sail to
the Westward, stood to the S.W. and
headed him off on our broadside and
sent some letters, proved to be the
German ship - "Luisa" from Bremen.
Capt Wilson found to San Francisco
with Coke - Capt and Mrs. Church
met on board with boat crew
Spent a few hours here Capt had
his wife, daughter, and son -
Employed in repairing new cutting
falls - putting new lashings on pendant
middle part of day stevedore East
Late part of day trading S.W.
Saw down spar and sail
on starboard tack
So ends this day -
Pumps and lifts all all right
All well.
Capt. Wilson reports seeing big school
of sperm whales, in Lat 35° Long 174 E.

Lat. by Obs., 36-37
Long. by Obs., 169-36
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 30.20
Thermom., Air,
" Sea,
Current,
Drift,
Wind, West
" Force, light
Sea, smooth
Weather, smooth
good.

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{	Mean Noon, S20° 22' 51"	{	Appt. Noon, 20 22 44	{	Var. 1 Hour, 31'17"	{	Equation of Time, decreasing, Add to Mean Time, 13m 29'59s. Sub. from Appt. Time, 13 29'75	{	Var. 1 Hour, 0'700s.	{	Sun's Semi-Diam., 16' 14"	{	Sidereal Time, 16h 9m 10'41s.

This day had light variable
winds. Ship on different tacks
all day - under all sail, working
to the West.
Saw down on port tack
heading S.W. under topsails and
courses.
No life seen today.
So ends this day -
F. Hamilton's boat washed &
dressed today, found it improv.
ing and happy.
All well.

Lat. by Obs., 37-00
Long. by Obs., 169-31
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 30.20
Thermom., Air,
" Sea,
Current,
Drift,
Wind, variable
" Force, light
Sea, smooth
Weather, good

NAUT. EPHEMERIS, {	{ Sun's Declination, increasing,	{ Mean Noon, 82° 35' 7" } Appt. Noon, 20 35 1	{ Var. 1 Hour, 30 22" }	Equation of Time, decreasing,		{ Var. 1 Hour, 0 73s. }	Sun's Semi-Diam., 16' 14"	Sidereal Time, 16h 13m 6 37s.
				Add to	Mean Time, 13m 12 39s.			
				Sub. from	Appt. Time, 13 12 56			

This day commences with a fresh breeze from the N. N. W. Ship on the Port tack by the inside, under topsails, courses and fly jib.
At 12.30 M. under ship -
This A. M. saw two fin backs also approach of black fish.
This P. M. saw two hump backs seen.
At 4.30 down strong breeze from the N. N. W. Ship under lower topsails, and strong starboard -
All employed in scraping
some today.
So ends this day.
All well.

Lat. by Obs., 36-15
Long. by Obs., 169-38
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 30.00
Thermom., Air,
" Sea,
Current,
Drift,
Wind, N. N. W.
" Force, fresh
Sea, ruffled
Weather, good.

NAUT. EPHEMERIS, {	{ Sun's Declination, increasing,	{ Mean Noon, 82° 47' 1" } Appt. Noon, 20 46 55	{ Var. 1 Hour, 29 28" }	Equation of Time, decreasing,		{ Var. 1 Hour, 0 76s. }	Sun's Semi-Diam., 16' 14"	Sidereal Time, 16h 17m 8 52s.
				Add to	Mean Time, 12m 54 41s.			
				Sub. from	Appt. Time, 12 54 58			

This day commences with a fresh breeze from the West - The vessel board tack under easy sail, all day.
First find late part of day raining and nasty.
Middle part clear and fine
employed in scraping the vessel deck -
One fin back seen.
Sun down ship on the port tack under short sail, then hauled to the starboard.
F. Hamilton no duty.
So ends this day.
All well.

Lat. by Obs., 37.00
Long. by Obs., 169-42
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 29.90
Thermom., Air,
" Sea,
Current,
Drift,
Wind, West
" Force, fresh
Sea, ruffled
Weather, cloudy +
raining.

NAUT. EPHEMERIS,	Sun's Declination, increasing,	{ Mean Noon, $S20^{\circ} 53' 31''$ Appt. Noon, 20 53 25 }	Var. 1 Hour, 28' 29"	Equation of Time, decreasing, Add to Mean Time, 12m 35' 66s. Sub. from Appt. Time, 12 35' 83	Var. 1 Hour, 0' 797s.	Sun's Semi-Diam., 16' 14"	Sidereal Time, 16h 21m 0' 08s.

This day commenced with
a fresh breeze from the East - Ship
steaming S. E. - under topsail and
course.

At 10 am started S. E. At 11.45
P. M. huffed to the ground on the port
tack heading S. E.
Camp by S. about dusk at old
jibs. One sun fish seen today -
killed, tongs and turkey
So ends this day -
all well.

Lat. by Obs., 36-35

Long. by Obs., 170-28

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 12°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths,

Barom., 30.30

Thermom., Air,

,, Sea,

Current,

Drift,

Wind,

,, Force,

Sea,

Weather,

NAUT. EPHEMERIS,	Sun's Declination, increasing,	{ Mean Noon, $S21^{\circ} 9' 38''$ Appt. Noon, 21 9 32 }	Var. 1 Hour, 27' 30"	Equation of Time, decreasing, Add to Mean Time, 12m 16' 16s. Sub. from Appt. Time, 12 16' 33	Var. 1 Hour, 0' 828s.	Sun's Semi-Diam., 16' 14"	Sidereal Time, 16h 24m 56' 64s.

This day commences with
a fresh breeze from the S. E. - Ship
steaming S. E. - Middle and
late part of day cloudy and
strong breeze -
at sun down continued
sail on the port tack, here too
for the night -
So ends this day -
all well.

Lat. by Obs., 37-27

Long. by Obs., 169-51

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 12°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots 10ths,

Barom., 30.20

Thermom., Air,

,, Sea,

Current,

Drift,

Wind,

,, Force,

Sea,

Weather,

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, S21° 20' 21" } { Appt. Noon, 21 20 16 }	Var. 1 Hour, 26 30"	{ Equation of Time, decreasing, Add to Mean Time, 11m 55.92s. Sub. from Appt. Time, 11 56.00 }	Var. 1 Hour, 0.853s.	Sun's Semi-Diam., 16' 15"	Sidereal Time, 16h 28m 53.19s.

fresh
board
This day commences with a
D. It began - ship steering East
Emp. found in backing out from
P. M. started, E x N.
At sun down went to anchor -
back -
Several fire boats seen
to end this day -
all well.

Lat. by Obs., 38-00
Long. by Obs., 168-20
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.

Barom., 30.00
Thermom., Air,
" Sea,
Current,
Drift,
Wind, N. E.
" Force, fresh
Sea, smooth
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, S21° 30' 40" } { Appt. Noon, 21 30 35 }	Var. 1 Hour, 25 29"	{ Equation of Time, decreasing, Add to Mean Time, 11m 34.96s. Sub. from Appt. Time, 11 35.13 }	Var. 1 Hour, 0.888s.	Sun's Semi-Diam., 16' 15"	Sidereal Time, 16h 32m 49.75s.

a fresh breeze from the S. E. - Ship
in different tracks all day working
to the S. E.
This A. M. plenty of fire boats
seen
At sun down shortened sail
on starboard tack
to end this day -
All well.

Lat. by Obs., 37-53
Long. by Obs., 168-02
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.

Barom., 30.10
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S. E.
" Force, fresh
Sea, rough
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, { increasing,	{ Mean Noon, S21° 40' 34" } Appt. Noon, 21 40 29	{ Var. 1 Hour, 24.26" }	Equation of Time, decreasing,		{ Var. 1 Hour, 0.917s. }	Sun's Semi-Diam., 16' 15"	Sidereal Time, 16h 36m 46.31s.
				Add to Mean Time, 11m 13.30s.	Sub. from Appt. Time, 11 13.47			

This day a light S. St. light - slip on star board tack by the wind. One fire back seen today. So ends this day - All well.

Lat. by Obs., 38-00
Long. by Obs., 167-30
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12"
Dev. used,

Steaming Time, h. m.
Average Speed, knots 10ths.

Barom., 30.10
Thermom., Air,
" Sea,

Current,
Drift,
Wind, S. St. light
" Force, light
Sea, heavy
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, { increasing,	{ Mean Noon, S21° 50' 3" } Appt. Noon, 21 49 59	{ Var. 1 Hour, 23.22" }	Equation of Time, decreasing,		{ Var. 1 Hour, 0.945s. }	Sun's Semi-Diam., 16' 15"	Sidereal Time, 16h 40m 42.38s.
				Add to Mean Time, 10m 50.95s.	Sub. from Appt. Time, 10 51.12			

This day commences with a strong breeze from the S. St. light made sail on the starboard tack - G. 30. A. M. started S. E. 1. P. M. started E. E. E. M. started S. E. A. M. in heavy rain - remainder of day picking up rain. At 4 pm shortened sail on the port tack. Pumps light and look out carefully attended. J. Augusta off duty with fever. So ends this day - All well.

Lat. by Obs., 38-48
Long. by Obs., 166-52
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12"
Dev. used,

Steaming Time, h. m.
Average Speed, knots 10ths.

Barom., 29.95
Thermom., Air,
" Sea,

Current,
Drift,
Wind, S. St. light
" Force, strong
Sea, rough
Weather, cloudy

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S21° 59' 8" } Var. 1 Hour, 22 17" }
increasing, { Appt. Noon, 21 59 4 }

{ Equation of Time, decreasing, } Var. 1 Hour, 0 971s.
Add to Mean Time, 10m 27 96s.
Sub. from Appt. Time, 10 28 13 }

Sun's Semi-Diam., 16' 15"

Sidereal Time, 16h 44m 39 42s.

This day commenced with a light breeze from the S. E. - Ship started E x S at 9 A.M. and made for the S. E. hauled the yard by the ground and stood all day on starboard tack. Employed at odd jobs about deck. Broke out coal oil - Mate employed in sewing trap sail - Cooped, making mast tugs, a few thin tacks seen - C. P. M. saw school killer, Augustina in duty again. At 4 pm down spent time sail for the night heading E & E. Pumps etc - all attended all well.

Lat. by Obs., 38-48
Long. by Obs., 165-57
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 12"
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 30.10
Thermom., Air,
" Sea,

Current,
Drift, S E
Wind, light
" Force,
Sea, smooth
Weather, good

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S22° 7' 47" } Var. 1 Hour, 21 11" }
increasing, { Appt. Noon, 22 7 43 }

{ Equation of Time, decreasing, } Var. 1 Hour, 0 997s.
Add to Mean Time, 10m 4 33s.
Sub. from Appt. Time, 10 4 50 }

Sun's Semi-Diam., 16' 15"

Sidereal Time, 16h 48m 35 98s.

This day commenced with a light breeze from the S. E. - Ship on starboard tack all day by the wind, under canvas and topsails. Employed at various things about deck. Mate employed in making boat sail - finished the same. It ends Thursday - all well.

Lat. by Obs., 38-28
Long. by Obs., 165-01
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 13"
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 30.30
Thermom., Air,
" Sea,

Current,
Drift,
Wind, S. S. E.
" Force, light
Sea, smooth
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, S22° 16' 0" {	Var. 1 Hour, {	Equation of Time, decreasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	increasing, {	Appt. Noon, 22 15 57 {	20.03" {	Add to Mean Time, 9m 40.10s. {	1.022s. {	16' 15" {	16h 52m 32.54s. {
				Sub. from Appt. Time, 9 40.27 {			

This day had light breeze from the S.E. x S. Ship on starboard tack all day - heading to the east. Emp. tried for nothing - and sailing jibs about deck and rigging. Two or three fin backs seen - Broke out tobacco today - So ends this day - all well.

Lat. by Obs., 38-25
Long. by Obs., 163-45
Course by Obs.,
Distance by Obs.,
,, by Log,
Var. used, 130
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.25
Thermom., Air,
,, Sea,
Current,
Drift,
Wind, S.E. x S
,, Force, fresh
Sea, smooth
Weather, good.

NAUT. EPHEMERIS, {	Sun's Declination, {	Mean Noon, S22° 23' 43" {	Var. 1 Hour, {	Equation of Time, decreasing, {	Var. 1 Hour, {	Sun's Semi-Diam., {	Sidereal Time, {
	increasing, {	Appt. Noon, 22 23 45 {	18.95" {	Add to Mean Time, 9m 15.30s. {	1.045s. {	16' 16" {	16h 56m 29.09s. {
				Sub. from Appt. Time, 9 15.46 {			

This day had a fresh breeze from the S. E. Ship on starboard tack under topsails and courses. Emp. employed at various things about deck. At 3.30 P.M. raised lot of right whale feed, saw some fin backs. S. S. G. saw a ship. Heard S. S. G. saw a whale just at sign showing made a good looking sport - don't know what it was. Spent sail on the port tack for the night. So ends this day - all well.

Lat. by Obs., 37-52
Long. by Obs., 162-50
Course by Obs.,
Distance by Obs.,
,, by Log,
Var. used, 130
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.40
Thermom., Air,
,, Sea,
Current,
Drift,
Wind, S. E.
,, Force, fresh
Sea, smooth
Weather, good.
cold

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, S22° 31' 9" } Appt. Noon, 22 31 7	Var. 1 Hour, 17' 55"	Equation of Time, decreasing,		Var. 1 Hour, 1' 066s.	Sun's Semi-Diam., 16' 16"	Sidereal Time, 17h 0m 25' 66s.
				Add to	Mean Time, 8m 49' 37s.			
				Sub. from	Appt. Time, 8 50' 12			

This day commenced with light air from the E S E. Ship in different tack during day - then employed at various things about deck -
Nothing much seen today
Killed one pig fish. O my
was had the fish to eat
this day -
all well -
Pumps and light etc
all better and.

Lat. by Obs., 38-03
Long. by Obs., 162-09
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 13°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 30.60
Thermom., Air,
" Sea,
Current,
Drift, E S E.
Wind, light
" Force, light
Sea, smooth
Weather, good.

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, S22° 38' 4" } Appt. Noon, 22 38 2	Var. 1 Hour, 16' 74"	Equation of Time, decreasing,		Var. 1 Hour, 1' 087s.	Sun's Semi-Diam., 16' 16"	Sidereal Time, 17h 4m 22' 21s.
				Add to	Mean Time, 8m 24' 12s.			
				Sub. from	Appt. Time, 8 24' 27			

This day had light breeze from the West - Ship under all sail, steering East - Small fish, such as seen during day - also plenty of feed and grampus also seen - one bird - small sea horse, sea slugs and sea urchins - could not make them out.
Sun down here too, on starboard tack, under short sail.
So ends this day -
all well.

Lat. by Obs., 38-03
Long. by Obs., 162-30
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 13°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths.,

Barom., 30.30
Thermom., Air,
" Sea,
Current,
Drift,
Wind, West,
" Force, light
Sea, smooth
Weather, good.

50th Week.]

MONDAY, 9th DECEMBER, 1907.

[343-22.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S22° 44' 32" } Var. 1 Hour, { Equation of Time, decreasing, } Var. 1 Hour, Sun's Semi-Diam., Sidereal Time,
 increasing, { Appt. Noon, 22 44 30 } 15' 63" Add to Mean Time, 7m 57.78s. } 1' 107s. 16' 16" 17h 5m 18.77s.
 Sub. from Appt. Time, 7 57.93 }

This day had fresh breeze
 from the west 7. At 11. steered S. E.
 At 2. P. M. wind hauled to S. W.
 steaming E - few fine tracks and some
 seed seen today - At 4. P. M. down
 shot and gail, for star board tack
 heading S. E.
 So ends this day
 all well

Lat. by Obs., —

Long. by Obs., —

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 13"

Dev. used,

Steaming Time, h. m.,

Average Speed, knots roths.

Barom., 30.00

Thermom., Air,

,, Sea,

Current,

Drift,

Wind, Variable

,, Force, Strong

Sea, rugged

Weather, rainy.

50th Week.]

TUESDAY, 10th DECEMBER, 1907.

[344-21.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S22° 50' 34" } Var. 1 Hour, { Equation of Time, decreasing, } Var. 1 Hour, Sun's Semi-Diam., Sidereal Time,
 increasing, { Appt. Noon, 22 50 32 } 14' 50" Add to Mean Time, 7m 31.00s. } 1' 125s. 16' 16" 17h 12m 15.32s.
 Sub. from Appt. Time, 7 31.14 }

This day had strong breeze
 from the West - At 6. A. M. made
 sail, steered E x S. - Ship under
 for sails and some topsails -
 squally
 rump, and high all
 attended. So ends this day
 Bound for Cape Horn.

Lat. by Obs., 38-57

Long. by Obs., 160-12

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used,

Dev. used, 13°

Steaming Time, h. m.,

Average Speed, knots roths.

Barom., 29.70

Thermom., Air,

,, Sea,

Current,

Drift,

Wind, Westly

,, Force, Strong

Sea, rugged

Weather, squally

NAUT. EPHEMERIS, {	Sun's Declination, <i>increasing,</i>	{ Mean Noon, S22° 56' 8" } { Appt. Noon, 22 56 7 }	{ Var. 1 Hour, 13' 37" }	Equation of Time, <i>decreasing,</i>		{ Var. 1 Hour, 1' 14.1s. }	Sun's Semi-Diam., 16' 16"	Sidereal Time, 17h 16m 11.88s.
				Add to Mean Time, 7m 3' 81s.				

This day had fresh breeze from the S. W. - Ship steering E. x S. by N. and later part of day wind shifted - Employed in heading new sails - Later part of day steering E. S. E. - To ends this day all well.

Lat. by Obs., 39-28
Long. by Obs., 157-23 1/2
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 13°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 29.85
Thermom., Air,
" Sea,
Current,
Drift,
Wind, West.
" Force, fresh
Sea, ruffled
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, <i>increasing,</i>	{ Mean Noon, S23° 1' 15" } { Appt. Noon, 23 1 14 }	Var. 1 Hour, 12' 23"	Equation of Time, <i>decreasing,</i>		{ Var. 1 Hour, 1' 15.7s.	Sun's Semi-Diam., 16' 16"	Sidereal Time, 17h 20m 8.44s.
				Add to Mean Time, 6m 36' 23s.				

This day commenced with a fresh breeze from the N. W. - Ship steering E. S. E. Employed in heading new sails, and other things about deck - To ends this day all well.
3595 miles from Cape Horn

Lat. by Obs., 40-17
Long. by Obs., 156-25
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 13°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 30.5
Thermom., Air,
" Sea,
Current,
Drift,
Wind, N. W.
" Force, fresh
Sea, ruffled
Weather, good

NAUT. EPHEMERIS.	{ Sun's Declination, increasing,	{ Mean Noon, S23° 5' 55" } { Appt. Noon, 23 5 54 }	{ Var. 1 Hour, 11'08" }	Equation of Time, decreasing,		{ Var. 1 Hour, 1'171s. }	Sun's Semi-Diam., 16' 16"	Sidereal Time, 17h 24m 5'00s.
				Add to Mean Time, 6m 8'29s.	Sub. from Appt. Time, 6 8'41			

This day had fresh breeze from the S.W. ship steering E.S.E. under all sail.
This A.M. employed at odd jobs about deck.
This P.M. put four down in rail pen - put rigging in the run for day and night all day.
P.M. steering East.
Pumps and lights all attended to ends this day
all well.

Lat. by Obs., 41-27
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log, 13
Var. used,
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.

Barom., 30.10
Thermom., Air,
" Sea,
Current,
Drift,
Wind, N x E
" Force, light
Sea, smooth
Weather, good

NAUT. EPHEMERIS	{ Sun's Declination, increasing,	{ Mean Noon, S23° 10' 7" } { Appt. Noon, 23 10 6 }	{ Var. 1 Hour, 9'03" }	Equation of Time, decreasing,		{ Var. 1 Hour, 1'184s. }	Sun's Semi-Diam., 16' 17"	Sidereal Time, 17h 28m 1'56s.
				Add to Mean Time, 5m 40'03s.	Sub. from Appt. Time, 5 40'14			

This day comes in with a gentle breeze from the S.W. ship under all sail steering E x S.
Men employed at various things about deck.
This P.M. killed one pig.
One pig got jammed during the night and died from the effects of it.
Broke out water and washed deck.
Later part of day steering E x S 1/4 N.
Pumps and lights carefully attended for navigation.
ends this day -
all well.

Distance to Cape Horn -
339 miles.

Lat. by Obs., 41-37
Long. by Obs., 150-59
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 13
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.

Barom., 30.10
Thermom., Air,
" Sea,
Current,
Drift,
Wind, S.W. x E
" Force, fresh
Sea, smooth
Weather, foggy

NAUT. EPHEMERIS, {	Sun's Declination, <i>increasing,</i>	{ Mean Noon, S23° 13' 51" } Appt. Noon, 23 13 51	Var. 1 Hour, 8° 78"	Equation of Time, <i>decreasing,</i>		Var. 1 Hour, 1° 196s.	Sun's Semi-Diam., 16' 17"	Sidereal Time, 17h 31m 58.11s.
				Add to Mean Time, 5m 11.47s.				
				Sub. from Appt. Time, 5 11.57				

This day commences with
upset and phosant breeze from
the west. Ship steering E & N by N.
under all sail.

Nothing seen during the
day. Pumps and lights cape
fully attended - as sharp look
out kept.

Fresh pork for dinner every
body feels good.
Heat had cramp in her
left hand leg - all well -

Lat. by Obs., 41-35-

Long. by Obs., 148-12-

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 13°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots roths.,

Barom., 30.15-

Thermom., Air,

,, Sea,

Current,

Drift,

Wind, West

,, Force, fresh

Sea, smooth

Weather, phosant

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, S23° 17' 8" } Appt. Noon, 23 17 7	Var. 1 Hour, 7° 61"	Equation of Time, decreasing,		Var. 1 Hour, 1° 206s.	Sun's Semi-Diam., 16' 17"	Sidereal Time, 17h 35m 54.67s.
				Add to Mean Time, 4m 42.64s.				
				Sub. from Appt. Time, 4 42.74				

This day commenced with
a strong breeze from the N. E.

Ship steering E & N under
main gallant sail and fore sail
and by the old job about
dusk.

P. M. put pigs in main
hatch - made all secure for a
gale.

3. P. M. took in main gallant
sail and topsails.

7.30 P. M. took ship to on
port tack under main
topsails and storm staysails.
Wind at N. E. E.

Barometer 29.30
12. M. M. wind hauled to
N. E.

So ends this day -
all well.

Lat. by Obs., 41-35-

Long. by Obs., 148-12-

Course by Obs.,

Distance by Obs.,

,, by Log,

Var. used, 14°

Dev. used,

Steaming Time, h. m.,

Average Speed, knots roths.,

Barom., 29.70

Thermom., Air,

,, Sea,

Current,

Drift,

Wind, N. E. E.

,, Force, gale

Sea, ruffled

Weather, rainy

+ cloudy - bad.

51st Week.]

TUESDAY, 17th DECEMBER, 1907.

364 days - [351-14.]

NAUT. EPHEMERIS,	{ Sun's Declination, increasing,	{ Mean Noon, S23° 19' 57" } { Appt. Noon, 23 19 56 }	{ Var. 1 Hour, 6'45" }	Equation of Time, <i>decreasing</i> ,		{ Var. 1 Hour, 1'216s. }	Sun's Semi-Diam., 16' 17"	Sidereal Time, 17h 39m 51'23s.
				Add to Mean Time, 4m 13'58s.				
				Sub. from Appt. Time, 4 13'56				

This day commenced with a fresh breeze from the N.W. - 4.30 a.m. - main sail stowed E x N. Middle and blue part of day ship under all sail steering E x N. Heavy squalls all day - 16 P.M. stowed E x N. 1/2 N. Sun down took in main Royal and main gallant sail Pumps and lights carefully attended - So ends this day All well.

Lat. by Obs., 42-02
Long. by Obs., 141-43
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 14°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.

Barom.,

Thermom., Air,

" Sea,

Current,

Drift,

Wind,

" Force,

Sea,

Weather,

51st Week.]

WEDNESDAY, 18th DECEMBER, 1907.

365 days. [352-13.]

NAUT. EPHEMERIS.	{ Sun's Declination, increasing,	{ Mean Noon, S23° 22' 17" } { Appt. Noon, 23 22 17 }	{ Var. 1 Hour, 5 28" }	Equation of Time, <i>decreasing</i> ,		{ Var. 1 Hour, 1 224s. }	Sun's Semi-Diam., 16' 17"	Sidereal Time 17h 43m 47.79s.
				Add to Mean Time, 3m 44.30s.				
				Sub. from Appt. Time, 3 44.38				

This day commenced with a fresh breeze from the west - Ship under all sail sail steering E x N 1/2 N. Men employed in sawing Pumps and lights all attended - So ends this day all well

Distance to Cape Horn -
by cruiser & distance
2836 miles.

Lat. by Obs., 41-58
Long. by Obs., 138-06
Course by Obs.,
Distance by Obs., 163
" by Log,
Var. used, 14°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots faths.

Barom.,

Thermom., Air,

" Sea,

Current,

Drift,

Wind,

" Force,

Sea,

Weather,

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, S23° 24' 10"	Var. 1 Hour, 4' 11"	{ Equation of Time, decreasing, Add to Mean Time, 3m 14.85s.	Var. 1 Hour, 1' 23ls.	Sun's Semi-Diam., 16' 17"	Sidereal Time, 17h 47m 44.35s.
		{ Appt. Noon, 23 24 9 }		{ Sub. from Appt. Time, 3 14.92 }			

This day commenced with a light breeze from the west - ship under full sail steering E. x N 1/2 N. - Employed at odd jobs about deck and rigging. In the P.M. steered E 1/2 S. Later part of day wind S. S. S. Pump and light carefully attended so ends this day. All well.

Lat. by Obs., 41-56
Long. by Obs., 135-46
Course by Obs.,
Distance by Obs., 108
" by Log,
Var. used, 14
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 29.90
Thermom., Air,
" Sea,
Current,
Drift, Slight
Wind, light
" Force, Slight
Sea, smooth
Weather, good

NAUT. EPHEMERIS, {	Sun's Declination, increasing,	{ Mean Noon, S23° 25' 34"	Var. 1 Hour, 2' 93"	{ Equation of Time, decreasing, Add to Mean Time, 2m 45.24s.	Var. 1 Hour, 1' 236s.	Sun's Semi-Diam., 16' 17"	Sidereal Time, 17h 51m 40.90s.
		{ Appt. Noon, 23 25 34 }		{ Sub. from Appt. Time, 2 45.30 }			

This day commences with a fresh breeze from the west ship under full sail, steering E 1/2 N. first and middle part of day. Later part of day E x N 1/2 S. Man employed at odd occupations about deck. Pumps and light all attended so ends this day. All well.

Put new bolt on board with Lat. & Long.

Lat. by Obs., 42-05
Long. by Obs., 132-29
Course by Obs.,
Distance by Obs., 149
" by Log,
Var. used, 15
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., 30.25
Thermom., Air,
" Sea,
Current,
Drift, Slight
Wind, Fresh
" Force, Fresh
Sea, smooth
Weather, good

51st Week.]

SATURDAY, 21st DECEMBER, 1907. (St. Thomas.)

[355-10.]

NAUT. EPHEMERIS, {	Sun's Declination, <i>increasing,</i>	{ Mean Noon, S23° 26' 30" Appt. Noon, 23 26 30 }	Var. 1 Hour, 1'76"	Equation of Time, <i>decreasing,</i>		Var. 1 Hour, 1'241s.	Sun's Semi-Diam., 16' 17"	Sidereal Time, 17h 55m 37.46s.
				Add to	Mean Time, 2m 15.52s.			

This day commenced with
a strong breeze from the West.
Ship steering E x N 1/2 N.
Squally and raining -
A. M. employed at various
repairs about deck.
P. M. broke out water and
was not detected
Sun down ship under
long t'ails and foresails -
Crews and lights can
fully attended -
So ends this day -
All well.

Lat. by Obs., 42° 04'
Long. by Obs., E x N 1/2
Course by Obs., E x N 1/2
Distance by Obs.,
" by Log,
Var. used, 18°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 30.00
Thermom., Air,
" Sea,
Current,
Drift,
Wind,
" Force, Strong
Sea, ruffled
Weather, rainy &
squally

52nd Week.]

SUNDAY, 22nd DECEMBER, 1907. (4th Sunday in Advent.)

[356-9.]

NAUT. EPHEMERIS {	Sun's Declination, <i>increasing,</i>	{ Mean Noon, S23° 26' 58" Appt. Noon, 23 26 58 }	Var. 1 Hour, 0'58"	Equation of Time, <i>decreasing,</i>		Var. 1 Hour, 1'24ds.	Sun's Semi-Diam., 16' 17"	Sidereal Time, 17h 59m 34.02s.
				Add to	Mean Time, 1m 45.71s.			

This day commenced with
a strong breeze and rain -
Ship steering E x N 1/2 N.
first part of day - Later part of
day steering E x N.
Pumps and lights can
fully attended -
So ends this day -
All well.

Lat. by Obs., 42° 08'
Long. by Obs., E x N 1/2
Course by Obs., E x N 1/2
Distance by Obs.,
" by Log,
Var. used, 15°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 29.95
Thermom., Air,
" Sea,
Current,
Drift,
Wind, N. N. E.
" Force, strong
Sea, ruffled
Weather, rainy &
squally

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S23° 26' 55" } Var. 1 Hour, 0° 60"	{ Equation of Time, decreasing, Add to Mean Time, 1m 15.34s. } Var. 1 Hour, 1° 24.5s.	{ Sub. from Appt. Time, 1 15.36 }	Sun's Semi-Diam., 16' 17"	Sidereal Time, 18h 3m 30.58s.
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This day commences with a light breeze from the N. N. E. accompanied with rain and fog. Ship under easy sail steering E & N 1/2 N. This A. M. sent a very large Royal sheet and haws P. M. took out head. Pumps, lights, and look out all latter day. So ends this day - all well

Lat. by Obs.,
Long. by Obs., *Ex N 1/2 E*
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, *16°*
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., *29.90*
Thermom., Air,
" Sea,
Current,
Drift,
Wind, *N. N. E.*
" Force, *light*
Sea, *smooth*
Weather, *rainy & squally.*

NAUT. EPHEMERIS, {	Sun's Declination, decreasing,	{ Mean Noon, S23° 26' 29" } Var. 1 Hour, 1° 78"	{ Equation of Time, decreasing, Add to Mean Time, 0m 45.94s. } Var. 1 Hour, 1° 21.6s.	{ Sub. from Appt. Time, 0 45.96 }	Sun's Semi-Diam., 16' 17"	Sidereal Time, 18h 7m 27.14s.
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This day commences with a calm and light air - Ship under all sail steering E & N 1/2 N. Employed at odd things about ship. Later part of day calm - and no steaming. This P. M. killed me pig for Xmas weighing 136 lbs. Gave off a new wheel rope this P. M. So ends this day - all well

Lat. by Obs., *42-00*
Long. by Obs., *121-11*
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, *16°*
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths.,

Barom., *30.10*
Thermom., Air,
" Sea,
Current,
Drift,
Wind, *Variable*
" Force, *light*
Sea, *smooth*
Weather, *cloudy*

Mrs Church crocheting at her cat. Left Church threatened to kill it and throw it overboard. Distance from Cape Horn - 2218 miles. Xmas Eve - God Bless all at home -

52nd Week.]

WEDNESDAY, 25th DECEMBER, 1907. (Christmas Day.)

[359-6.]

NAUT. EPHEMERIS, { Sun's Declination, decreasing, { Mean Noon, $82^{\circ} 25' 33''$ } Var. 1 Hour, 2' 96" } Equation of Time, decreasing, { Add to Mean Time, 0m 16' 05s. } Var. 1 Hour, 1' 245s. } Sun's Semi-Diam., 16' 17" } Sidereal Time, 18h 11m 23' 69s. }

This day commences dead flat calm first part of day - suddenly a breeze later part of day had light air from the N. E. Ship made all sail, by the mid of the port tack. Pumps and light carefully attended to.
So ends this Xmas 1907.
All well

Lat. by Obs., $42-12$
Long. by Obs., $130-36$
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 16°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths,

Barom., 30.22
Thermom., Air,
" Sea,
Current,
Drift, Variable
Wind, light air
" Force,
Sea, smooth
Weather, good.

52nd Week.]

THURSDAY, 26th DECEMBER, 1907.

[360-5.]

NAUT. EPHEMERIS, { Sun's Declination, decreasing, { Mean Noon, $82^{\circ} 24' 8''$ } Var. 1 Hour, 4' 13" } Equation of Time, increasing, { Sub. from Mean Time, 0m 13' 30s. } Var. 1 Hour, 1' 243s. } Sun's Semi-Diam., 16' 17" } Sidereal Time, 18h 15m 20' 25s. }

This day commences with a light breeze from the East. Ship under all sail, on the port tack. 10. A. M. wind hauled to the E. S. E. with increasing breeze. 3. P. M. wind S. E. Strong breeze. 4. P. M. more ship - took in light sails and the topsail. 5. 30 P. M. took in every thing but lower topsails. 8. P. M. hove to on starboard tack and lower mainsail and storm staysail. 8. 30 P. M. strong gale. So ends this day with heavy rain.
All well.

Lat. by Obs., $43-25$
Long. by Obs.,
Course by Obs.,
Distance by Obs.,
" by Log,
Var. used, 17°
Dev. used,

Steaming Time, h. m.,
Average Speed, knots roths,

Barom., 29.30
Thermom., Air,
" Sea,
Current,
Drift,
Wind, Variable
" Force, fresh
Sea, smooth
Weather, gale

52nd Week.]

FRIDAY, 27th DECEMBER, 1907.

[361-4.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S23° 22' 14" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, { Sun's Semi-Diam., } Sidereal Time, }
 decreasing, { Appt. Noon, 23 22 14 } 5' 31" Sub. from Mean Time, 0m 43' 58s. 1' 239s. 16' 17" 18h 19m 16' 51s.
 Add to Appt. Time, 0 43' 59

This day commenced with a fresh breeze from the S.E. Ship under plain sail. At 9.30 A.M. had calm. First heavy swell, ship down main yard. Lashed or tightened the trust bands. Also fixed the shores on the ends of the yard.

P.M. sent it aloft again finishing at 2. P.M. Broke out water thro' P.M. Late part of day stirring E x S. With fresh breeze from S x E. So ended this day - all well.

Lat. by Obs., 42-58
 Long. by Obs., 130-04
 Course by Obs.,
 Distance by Obs.,
 „ by Log,
 Var. used, 17°
 Dev. used,

Steaming Time, h. m.,
 Average Speed, knots 10ths.

Barom., 29.90
 Thermom., Air,
 „ Sea,
 Current,
 Drift, S.E. x S.
 Wind, S.E. x S.
 „ Force, fresh
 Sea, rugged
 Weather, squally

52nd Week.]

SATURDAY, 28th DECEMBER, 1907.

[362-3.]

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S23° 19' 53" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, { Sun's Semi-Diam., } Sidereal Time, }
 decreasing, { Appt. Noon, 23 19 53 } 6' 48" Sub. from Mean Time, 1m 13' 26s. 1' 234s. 16' 17" 18h 23m 13' 37s.
 Add to Appt. Time, 1 13' 28

This day commenced with a strong breeze from the South. Ship under full plain sail. Steering E x S. Middle aged calm part of day mild S.E. Bumps and light all afternoon. So ended this day - all well.

Lat. by Obs., 42-53
 Long. by Obs., 116-50
 Course by Obs.,
 Distance by Obs.,
 „ by Log, 161
 Var. used, 18°
 Dev. used,

Steaming Time, h. m.,
 Average Speed, knots 10ths.

Barom., 30.30
 Thermom., Air,
 „ Sea,
 Current,
 Drift,
 Wind, S.E. x S.
 „ Force, Fresh
 Sea, rugged
 Weather, squally

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S23° 17' 4" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, Sun's Semi-Diam., Sidereal Time, decreasing, { Appt. Noon, 23 17 3 } 7.65" Sub. from Mean Time, 1m 42.80s. } 1.223s. 16' 17" 13h 27m 9.93s. Add to Appt. Time, 1 42.83 }

This day commenced with a fresh breeze from the South right by Equator - Ship on the Star board tack sleeping & under full sail - Sharp lookout kept - Pumps and light all attended to. Ends this day - Last Sunday of 1907 - All well

Lat. by Obs., 43-17
Long. by Obs., 113-40
Course by Obs.,
Distance by Obs.,
,, by Log, 14.3
Var. used, 190
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 30.35
Thermom., Air,
,, Sea,
Current,
Drift,
Wind, S.
,, Force, fresh
Sea, smooth
Weather, cloudy.

NAUT. EPHEMERIS, { Sun's Declination, { Mean Noon, S23° 13' 46" } Var. 1 Hour, { Equation of Time, increasing, } Var. 1 Hour, Sun's Semi-Diam., Sidereal Time, decreasing, { Appt. Noon, 23 13 46 } 8.82" Sub. from Mean Time, 2m 12.17s. } 1.220s. 16' 18" 13h 31m 6.48s. Add to Appt. Time, 2 12.22 }

This day commenced with a light breeze from the S.E. - Ship under full sail by the wind on starboard. Pumps and light all attended to. Ends this day - All well.

Lat. by Obs., 43-18
Long. by Obs., 111-28
Course by Obs.,
Distance by Obs.,
,, by Log, 190
Var. used, 190
Dev. used,

Steaming Time, h. m.,
Average Speed, knots 10ths,

Barom., 30.30
Thermom., Air,
,, Sea,
Current,
Drift,
Wind, S.E.
,, Force, light
Sea, smooth
Weather, good.

NAUT. EPHEMERIS,	{	Sun's Declination, decreasing,	{	Mean Noon, S23° 10' 1"	{	Var. 1 Hour, 9' 38"	{	Equation of Time, increasing,		{	Var. 1 Hour, 1' 21 1/2s.	Sun's Semi-Diam., 16' 15"	Sidereal Time, 18h 35m 3.04s.
								Sub. from Mean Time,	2m 41.34s.				
								Add to	Appt. Time,				

This day commenced with a flat calm - but with different tacks. P. A. M. - light breeze springing up from the north. Middle and late part of day ship steering E, under full sail -

Emp tried to - a W in - scraping grass off the side of the ship and took in the rigging

So ends this day and year of 1907 - Thank God for all kind favors -

Ally mill.

Lat. by Obs.,	43-10
Long. by Obs.,	110-11
Course by Obs.,	
Distance by Obs.,	
„ by Log,	
Var. used,	20°
Dev. used,	
Steaming Time,	h. m.,
Average Speed,	knots faths.
Barom.,	30.15
Thermom., Air,	
„ Sea,	
Current,	
Drift,	
Wind,	land
„ Force,	light
Sea,	smooth
Weather,	good

NAUT. EPHEMERIS,	{	Sun's Declination, decreasing,	{	Mean Noon, S23° 5' 47"	{	Var. 1 Hour, 11' 14"	{	Equation of Time, increasing,		{	Var. 1 Hour, 1' 20 1/2s.	Sun's Semi-Diam., 16' 15"	Sidereal Time, 18h 35m 59.60s.
								Sub. from Mean Time,	3m 10.27s.				
								Add to	Appt. Time,				

Lat. by Obs.,	
Long. by Obs.,	
Course by Obs.,	
Distance by Obs.,	
„ by Log,	
Var. used,	
Dev. used,	
Steaming Time,	h. m.,
Average Speed,	knots faths.
Barom.,	
Thermom., Air,	
„ Sea,	
Current,	
Drift,	
Wind,	
„ Force,	
Sea,	
Weather,	

MEMORANDA.

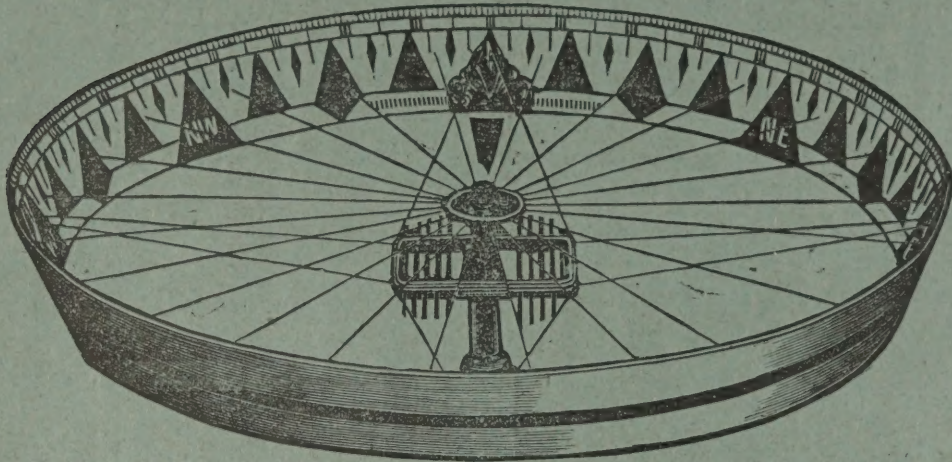
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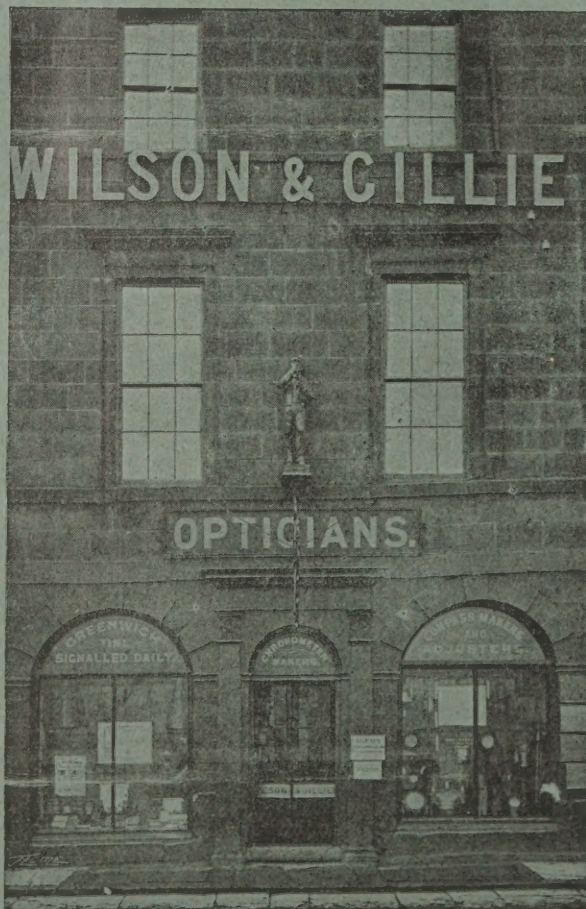
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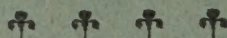
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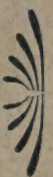
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